



CUSTOMS AUTHORITY FOR ADVANCE RULINGS
O/o COMMISSIONER OF CUSTOMS
NEW CUSTOM HOUSE, NEAR IGI AIRPORT, NEW DELHI-110037
 [Email: cus-advrulings.del@gov.in]

Shailesh Kumar (Customs Authority for Advance Rulings, New Delhi)

F. No. VIII/CAAR/Delhi/Aptiv (Chennai)/216/2024

The day of 07, May, 2025

Ruling No. CAAR/Del/Aptiv/26/2025

In application No. 03/2025 dated 22.01.2025

1157 to 163
07/05/2025

Name and address of the applicant	:	M/s Aptiv Component India Private Limited, Plot No, 7, Industrial Area, Dharuhera-122106, Dist. Rewari, Haryana, India
Commissioner concerned	:	The Principal Commissioner of Customs, Chennai- VII (Air Cargo), New Customs House, Air Cargo Complex, Meenambakkam, Chennai- 600016
Present for the Applicant	:	Sh. Gulzar Didwania, AR, Sh. Animesh Mohanty, AR, Sh. Mohit Malhotra, AR
Present for the Department	:	Sh. I.B. Mishra, Deputy Commissioner, Chennai-VII (Air Cargo), Chennai.

Ruling

M/s Aptiv Component India Private Limited ('Applicant'), a applicant having its registered corporate office located at Plot No, 7, Industrial Area, Dharuhera-122106, Dist. Rewari, Haryana, India. and is holding IEC number 0595006019. The Applicant is engaged in the business of automotive technology solutions, providing comprehensive vehicle architecture encompassing software, hardware, and electrical/electronic systems

- 1.1. The Applicant has approached the Customs Advance Rulings Authority for determining the classification of following models of Ferrite Beads, which are being imported by the Applicant since First Quarter of 2022-23 from China for suppressing electromagnetic interference, filtering out high frequency noise, etc. This product prevents interference with sensitive electrical/electronic circuits and improves overall system stability. These twenty-four specific

products can be categorized as the ferrite beads, which have common functionality and features relevant for determining their appropriate classification:

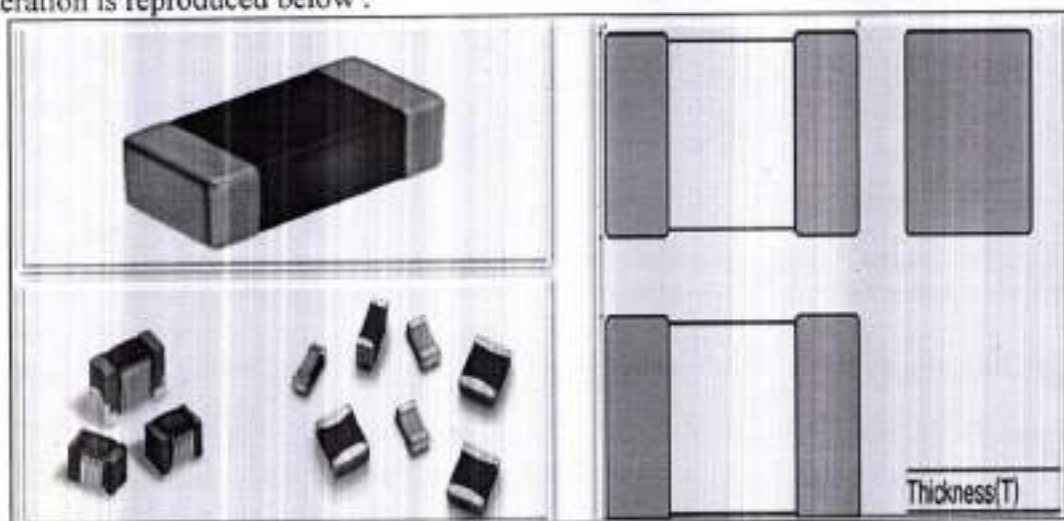
S.no	Product Number	Product description	Product Catalogue link
1	MPZ1608S 300ATDH5	FERRITE BEAD	https://product.tdk.com/system/files/dam/doc/product/emc/emc/beads/catalog/beads_automotive_power_m_pz1608_en.pdf
2	MPZ1608S 601ATD25	FERRITE- 600OHM,0603	https://product.tdk.com/system/files/dam/doc/product/emc/emc/beads/catalog/beads_automotive_power_m_pz1608_en.pdf
3	BLM15AG 121SH1D	FERRITE- 120OHM,25%,SM	https://www.murata.com/products/productdata/8796743696414/QNFA9103.pdf?1658287813000
4	BLM15AG 221SH1D	FERRITE- 220OHM,25%,SM	https://www.murata.com/products/productdata/8796743696414/QNFA9103.pdf?1658287813000
5	BLM15AG 601SH1D	FERRITE- 600OHM,25%,SM	https://www.murata.com/products/productdata/8796743696414/QNFA9103.pdf?1658287813000
6	BLM15BD 102SH1D	FERRITE- 1000OHM,25%,SM	https://www.murata.com/products/productdata/8796743696414/QNFA9103.pdf?1658287813000
7	BLM15BD 471SH1D	FERRITE- 470OHM,25%,SM	https://www.murata.com/products/productdata/8796743696414/QNFA9103.pdf?1658287813000
8	MPZ1608S 221ATD25	FERRITE BEAD- SM,220OHM, 25%,0603	https://product.tdk.com/system/files/dam/doc/product/emc/emc/beads/catalog/beads_automotive_power_m_pz1608_en.pdf
9	MPZ2012S 101ATD25	FERRITE BEAD- SM, 100 OHM, 25%, 0805	https://product.tdk.com/system/files/dam/doc/product/emc/emc/beads/catalog/beads_automotive_power_m_pz2012_en.pdf
10	MPZ1608S 101ATDH5	FERRITE BEAD- SM, 100OHM,	https://product.tdk.com/system/files/dam/doc/product/emc/emc/beads/catalog/beads_automotive_power_m_pz1608_en.pdf
11	MPZ1608S 331ATD25	FERRITE BEAD- SM,330OHM,25%, 0603	https://product.tdk.com/system/files/dam/doc/product/emc/emc/beads/catalog/beads_automotive_power_m_pz1608_en.pdf
12	BLM18PG 121SH1D	FERRITE-120HM, 25%,SM	https://www.murata.com/products/productdata/8796737273886/QNFA9101.pdf?1698377420000
13	MPZ2012S 601ATD25	FERRITE- 600OHM,25% SM	https://product.tdk.com/system/files/dam/doc/product/emc/emc/beads/catalog/beads_automotive_power_m_pz2012_en.pdf
14	BLM21SP 700SH1D	FERRITE- SM,700OHM,25%,0 805	https://www.murata.com/products/productdata/8796740354078/QNFA9102.pdf?1650290415000
15	BLM18KG 121TH1D	FERRITE- SM,120OHM,0603	https://www.murata.com/products/productdata/8796737273886/QNFA9101.pdf?1698377420000
16	BLM18KG 221SH1D	FERRITE- SM,220OHM,0603	https://www.murata.com/products/productdata/8796737273886/QNFA9101.pdf?1698377420000
17	BLM18KG 471BH1D	FERRITE- 470OHM,25%,SM	https://www.murata.com/products/productdata/8798137286686/QNFA9129.pdf?1699846231000
18	BLM18BD 471SH1D	FERRITE- BLM11B471SD	https://www.murata.com/products/productdata/8796737273886/QNFA9101.pdf?1698377420000

19	MMZ1608S 601ATD25	FERRITE-SM,600 OHM	https://product.tdk.com/system/files/dam/doc/product/emc/emc/beads/catalog/beads_automotive_signal_m/mz1608_en.pdf
20	MMZ2012S 601ATD25	FERRITE-SM	https://product.tdk.com/system/files/dam/doc/product/emc/emc/beads/catalog/beads_automotive_signal_m/mz2012_en.pdf
21	BLM18AG1 02SH1D	ELECTRONIC FERRITE- 1000,0603	https://www.murata.com/products/productdata/8796737273886/QNFA9101.pdf?1698377420000
22	MPZ2012S1 02ATD25	FERRITE- 1000OHM,25%,SM	https://product.tdk.com/system/files/dam/doc/product/emc/emc/beads/catalog/beads_automotive_power_m/pz2012_en.pdf
23	BLM15BD 182SH1D	FERRITE- 1800OHM,25%,SM	https://www.murata.com/products/productdata/8796743696414/QNFA9103.pdf?1658287813000
24	MMZ1608S 121ATD08	FERRITE- SM,RF,0603	https://product.tdk.com/system/files/dam/doc/product/emc/emc/beads/catalog/beads_automotive_signal_m/mz1608_en.pdf

1.2 The applicant submitted that even though detailed description and product numbers are different, all the twenty-four goods answer to the product name of "ferrite beads". All the surface-mount ferrite beads are differentiated solely by their impedance, measured in ohms, and a tolerance level of up to 25%. Therefore, a single application for pronouncing ruling on their appropriate classification has been submitted, placing reliance on the ruling issued by Hon'ble CAAR authority of New Delhi, in the matter of **M/s Amazon Wholesale India Pvt. Ltd having Ruling No. CAAR/Del/Amazon/17/2021, dated 20-7-2021 [2021 (378) E.L.T. 700 (A.A.R. - Cus. - Del.)]**, wherein eleven products under a single application for a family of Echo devices having common functionality and features, were covered.

Product usage, functions and other technical capabilities:

1.3 Ferrite beads are **two terminal passive electronic components** made from ferrite; a ceramic material composed of iron oxide mixed with other metals. Ferrite beads are essential components in many electronic devices, contributing to efficient operation and enhanced performance by mitigating noise and improving inductive characteristics. The image of the product under consideration is reproduced below :



Technical Details of product & How ferrite beads work:

- 1.4 In automobiles power lines, signal lines, particularly in digital circuits, high-frequency noise can be introduced by various sources, including switching power supplies, digital logic circuits, and external interference. This noise can degrade signal integrity, cause system instability, and even lead to malfunctions. Ferrite beads are strategically placed on power lines, signal line etc. to mitigate this noise. **They act as a high-frequency impedance**, effectively blocking the passage of unwanted noise signals. This helps to maintain signal quality and ensure reliable system operation.
- 1.5 The product under consideration is essentially a **type of inductor** specifically designed to store energy in a magnetic field when electrical current passes through it. **A ferrite bead possesses the properties of inductors in following ways:**

- Ferrite materials have high magnetic permeability, which allows them to effectively concentrate, and **store magnetic fields generated by the current flowing through the wire.**
- When AC signals pass through a ferrite bead, **it exhibits inductive properties**, opposing changes in current. This creates a voltage drop across the bead that can filter out high-frequency noise while allowing lower frequencies to pass.
- **Ferrite beads have an impedance** that increases with frequency, behaving like an inductor at high frequencies. This makes them effective for suppressing high-frequency noise in circuits.
- As highlighted above in the images, ferrite bead is a device that typically consists of an insulated wire coiled into a coil, often around a magnetic core. Its operation is based on the principle of self-induction, an electrical phenomenon where a changing current induces a voltage within the coil itself.

Benefits of Using Ferrite Beads in Automotive Electronics:

- 1.6 The benefit of using ferrite beads in automobile electronics are as under
- **Improved Electromagnetic Compatibility (EMC):** Ferrite beads help to reduce electromagnetic interference (EMI) and radio frequency interference (RFI), ensuring compliance with regulatory standards and preventing disruptions to other electronic systems.
 - **Enhanced Signal Integrity:** By filtering out high-frequency noise, ferrite beads contribute to better signal quality and reliability, especially in high-speed digital circuits.
 - **Reduced Power Supply Noise:** Clean power supply lines are essential for the proper functioning of electronic components. Ferrite beads help to maintain stable voltage levels and reduce noise-induced errors.
 - **Increased System Reliability:** By mitigating the effects of electromagnetic interference and improving signal integrity, ferrite beads help to enhance the overall reliability of automotive electronic systems.

Application of ferrite beads:

- 1.7 The product under consideration is designed to use by the Applicant in manufacturing of **electronics items to be used in automobiles** having various applications due to their ability to manage electromagnetic interference (EMI) and enhance signal integrity. The way product is utilized in various systems is as under:

- **Electronic Control Units (ECUs):** Ferrite beads help reduce noise on the power and signal lines, ensuring stable operation of ECUs that manage engine performance, safety systems, and other critical functions.
- **Powertrains:** In powertrain systems, ferrite beads are used to filter out high-frequency noise from power supplies and control signals, improving the performance of components like fuel injectors, ignition systems, and electric motors.
- **Body Control Modules:** For body control systems (like lighting, windows, and locks), ferrite beads prevent electromagnetic interference from affecting the functionality of sensors and actuators, enhancing reliability.
- **Car Multimedia Systems (Telematics):** Ferrite beads are essential in car audio and video systems, where they suppress high-frequency noise and improve the clarity of signals, ensuring high-quality multimedia performance.

Chain of events leading to the present Application:

1.8 The applicant is currently importing the product under consideration from first quarter of FY 2022-23, self-classifying the same under **tariff entry 8541 29 00**, which covers semiconductor devices (for example, transistors, other than photosensitive transistors). As per the applicant, several industry participants are adopting tariff entry **8504 50 90** for classifying ferrite beads. These competing classifications, resulting in absence of certainty, are as follows:

	Competing entry 1	Competing entry 2
Tariff entry	8541 29 00	8504 50 90
Heading Description	*Semiconductor devices (for Example, diodes, transistors, ***semiconductor-based transducers); photosensitive semiconductor devices, including photovoltaic cells whether or not assembled in modules or made up into panels; light emitting diodes (led), whether or not assembled with other light emitting diodes (led); mounted piezo-electric crystals	Electrical transformers, static converters (for example, rectifiers) and inductors
	- Transistors, other than photosensitive transistors; - - Others	- Other inductors - - - Others
Applicable tariff rate	Free	7.5%

1.9 It is highlighted that presently there is a difference of 7.5% in the effective rate of applicable custom duty between the two competing entries mentioned above. Therefore, the Applicant has approached the Authority to seek clarity and certainty regarding appropriate classification of the Ferrite beads, which is intended for use in automotive ECUs, powertrains, body controls, and car multimedia systems, in the light of difference in prevalent classification practice, with consequential duty implications. The Applicant as per the application agreed to bear & pay the said differential duty as per the provisions of the Customs Act, in case the Authority rules the classification of ferrite beads to be under sub-heading 8504 50 90.

Statement containing the Applicants' interpretation of law and facts in respect of the aforesaid question(s)

A. Classification of the product under consideration under CTH 8541:

- 1.10 The heading of Chapter 85 covers semiconductor devices, photosensitive semiconductor devices, and related items. For ease of reference, the relevant extract of the Schedule 1 to the Customs Tariff Act, 1975 has been provided below:

Table 2

<i>Chapter 85 - Electrical machinery and equipment and parts thereof; sound recorders and reproducers, television image and sound recorders and reproducers, and parts and accessories of such articles</i>		
Tariff Entry	Items Covered	Standard Rate
8541	*Semiconductor Devices (For Example, Diodes, Transistors, ***Semiconductor-Based Transducers); Photosensitive Semiconductor Devices, Including Photovoltaic Cells Whether Or Not Assembled In Modules Or Made Up Into Panels; Light emitting Diodes (Led), Whether Or Not Assembled With Other Light Emitting Diodes (Led); Mounted Piezo-Electric Crystals	
	- Transistors, other than photosensitive transistors	
8541 29 00	- Other	Free

- 1.11 CTH 8541 covers Semiconductor devices, whose operations is based on the electronic properties of certain "semiconductor" materials or, for the purpose of semiconductor-based transducers, on their semiconductor properties including physical (e.g., mechanical, thermal), electrical, optical and chemical properties.
- 1.12 CTH 8541 is further subdivided into seven 1-dash sub-headings. The second one-dash subheading (i.e., 8541 21) covers ' Transistors, other than photosensitive transistors with a dissipation rate of less than 1 W.
- 1.13 In terms of Explanatory Notes, 2022 edition as issued by the World Customs Organization (hereinafter referred to as 'WCO Explanatory Notes'), this heading includes transistors whose operation depends on the variation in resistivity between two of the terminals upon the application of an electric field to the third terminal. This includes Bipolar transistors, Field effect transistors (also known as metal oxide semiconductors (MOS)), Insulated Gate Bipolar Transistors (IGBT). Relevant part of explanatory notes is herein reproduced:
- "Transistors are three- or four-terminal devices capable of amplification, oscillation, frequency conversion, or switching of electrical currents. The operation of a transistor depends on the variation in resistivity between two of the terminals upon the application of an electric field to the third terminal. The applied control signal or field is weaker than the resulting action brought about by the change in resistance and thus amplification results.*
- Transistors include:*
- (1) *Bipolar transistors, which are three-terminal devices consisting of two diode type junctions, and whose transistor action depends on both positive and negative charge carriers (hence, bipolar).*
- (2) *Field effect transistors (also known as metal oxide semiconductors (MOS)), which may or may not have a junction, but which depend on the induced depletion (or enhancement) of available charge carriers between two of the terminals. The transistor action in a field effect transistor employs only one type of charge carrier (hence, unipolar). A parasitic body diode, which is produced in a MOS type transistor (also known as MOSFET), may operate as a*

freewheeling diode during inductive load switching. MOSFET which have four terminals are known as tetrodes.

(3) Insulated Gate Bipolar Transistors (IGBT), which are three-terminal devices consisting of a gate terminal and two load terminals (emitter and collector). By applying appropriate voltages across the gate and emitter terminals, current in one direction can be controlled, i.e., turned on and turned off. IGBT chips may be incorporated with diodes in a single package (packaged IGBT devices), which protect the IGBT device and allow it to continue to function as a transistor."

- 1.14 It is also emphasized that transistors are **active components** due to its ability to inject energy into the circuit and actively influence the flow of current. The product under consideration cannot be considered as transistors which can be seen in table below:

S.no	Parameters	Ferrite Beads	Transistors
1	Functionality	These are passive components used primarily for filtering high-frequency noise and suppressing electromagnetic interference (EMI). They do not amplify signals or switch currents.	These are active components used for amplification, switching, and signal modulation. They can control larger currents and voltages based on a smaller input signal.
2.	Energy behaviour	They store energy in a magnetic field when current flows through them, but they do not provide gain or control over the energy flow. Their main role is to impede high-frequency signals.	They can control the flow of electrical current and can amplify signals. They operate by using a small input current to control a larger output current.
3.	Component classification	Classified as passive components since they do not add energy to the circuit; they simply dissipate or redirect it.	Classified as active components because they can inject energy into the circuit and actively influence the flow of current.
4.	Construction	Made from a donut-shaped ferrite material with a high magnetic permeability. They can be small SMD (surface mount device) components or larger through-hole components	Made from semiconductor materials like silicon and can contain multiple layers with complex structures.
6.	Applications	Used in power supplies, data cables, RF circuits to filter noise and suppress EMI	Used in amplifiers, oscillators, logic gates, power electronics for switching and signal processing
7.	Current Handling	Limited current handling capacity. Saturation can occur at high currents, reducing their effectiveness	Can handle a wide range of currents depending on the type. Power transistors can handle high currents

- 1.15 In view of the above, as per the applicant's understanding, the product under consideration is a passive component that is used for filtering high-frequency noise and suppressing electromagnetic interference (EMI). While on the other hand, transistors are active components that are used for amplification, switching, and signal modulation. **Therefore, we are of the view that the product under consideration cannot be considered as transistors, therefore, would be outside the purview of coverage under CTH 8541.**

Reasons for adopting the classification under tariff entry 8541 29 00 for past imports of ferrite beads:

- 1.16 It is pertinent to highlight that the applicant has been classifying ferrite beads under tariff entry 8541 29 00 which provides for other: transistor (i.e., semiconductor devices). It is submitted that it is possible to make an argument for their classification under tariff entry 8541 29 00 as such, based on certain properties and behaviours as specified hereunder:

Sr No.	Particulars	Ferrite bead properties	Semiconductor based Transistor properties
a.	Electric conductivity	Ferrite beads exhibit a unique property of increasing resistance as the frequency of the applied signal increases	This characteristic is similar to how semiconductors can have varying conductivity based on applied voltage or temperature
b.	Magnetic Properties	Ferrite materials can exhibit changes in electrical resistance when exposed to a magnetic field	This effect, is also observed in semiconductor-based transistors.
c.	Application in electronic devices	Ferrite beads are widely used in electronic circuits to suppress high-frequency noise.	This function is similar to how semiconductor devices, like transistors, can be used to amplify or filter signals.

- 1.17 In view of the above similarities, a conscious call was taken by the applicant to classify ferrite beads under CTH 8541 29 00 for past period. However, based on information received from the several industry player, they had undertaken a detailed analysis on the classification adopted for ferrite bead and have approached the authority for obtaining certainty on classification and the duty implication, if any.
- 1.18 Further, it is also submitted that although, there are commonalities between the functioning of the ferrite beads & that of a semiconductor-based transistors, it is important to note that the imported product (i.e., ferrite beads) are **passive devices and functions to suppress noise, and not to amplify or switch signals like traditional semiconductors transistors.**
- 1.19 **In view of this major distinction**, it is applicant's understanding that the ferrite beads can't be considered as semiconductor-based transistor and would be outside the purview of CTH 8541 as mentioned above.

Classification of the product under consideration under CTH 8504.

- 1.20 The heading of Chapter 85 covers electrical transformers, static converters and inductors. For ease of reference, the relevant extract of the Schedule 1 to the Customs Tariff Act, 1975 has been provided below:

Table 1

<i>Chapter 85 - Electrical machinery and equipment and parts thereof; sound recorders and reproducers, television image and sound recorders and reproducers, and parts and accessories of such articles</i>		
Tariff Entry	Items Covered	Standard Rate
8504	Electrical Transformers, Static Converters (For Example, Rectifiers) and Inductors	
8504 50	- Other inductors:	
8504 50 90	- Other	7.5%

1.21 In terms of 'WCO Explanatory Note for Tariff Heading 8504, this heading covers **inductors** which are essentially consist of a single coil of wire which, inserted in an AC circuit, **limits or prevents by its self-induction the flow of the AC**. These inductors may vary from small chokes used in wireless circuits, instruments, etc., to large coils often mounted in concrete, used in power circuits for **limiting the flow of current in the event of a short circuit**. The relevant excerpt from the general notes is reproduced below:

"III- INDUCTORS

These consist essentially of a single coil of wire which, inserted in an AC circuit, limits or prevents by its self-induction the flow of the AC. They vary from small chokes used in wireless circuits, instruments, etc., to large coils often mounted in concrete, used in power circuits (e.g., for limiting the flow of current in the event of a short circuit)."

1.22 A perusal of the above explanatory notes suggests that **CTSH 8504.50** covers **different type of inductors that are used to limit or prevent the flow of the Alternating Current (AC)**. The Applicant uses the product under consideration for **noise filtering/suppression** and for **limiting the flow of AC current for use in automotive ECUs, powertrains, body controls, and car multimedia systems etc.**

1.23 As enumerated in the above para, **the product in question primary function is to limit or prevent the flow of the AC current**. The ferrite beads imported by the applicant are used for noise filtration/suppression which is achieved by restricting the flow of AC current in body controls, and car multimedia systems etc. Therefore, it is submitted that imported chokes are directly covered under CTH 8504 which provides for inductors – others.

1.24 The applicant submits that product under consideration would merit classification **under HSN 8504 50 90**. As such, this is a residual entry for inductors other than choke coil. **Hence the appropriate classification for the subject goods should be under tariff entry 8504 50 90 (i.e., other inductors).**

1.25 This position is also supported by the decision of the Hon'ble Supreme Court in the case of **Collector of Customs Vs. Business Forms Ltd. – 2002 (142) E.L.T. 18 (S.C.)**, specifically referring to paragraph 2 of the said judgment, wherein it was established that the HSN Explanatory Notes carry not only persuasive weight but also deserve greater consideration in the process of classifying goods under the Customs Tariff.

1.26 The applicant emphasized that the product in question possesses a distinct identity and performs a specific function related to induction. Therefore, the product in question is correctly classifiable under tariff entry 8504 29 00 as inductors. Without prejudice to the submissions made above, it is respectfully submitted that the product under consideration is not expressly covered under tariff heading 8541. In light of the above submissions, the Applicant contends that the product under consideration is expressly covered within the scope of heading 8504.

1.27 The applicant further submitted that the questions raised by it in their application are not pending before any officer of Customs, Appellate Tribunal or any Court of Law and they have not been issued any summons mandating it to provide any kind of information with respect to import of the subject goods. However, they clarified that the issuance of such summons by any officer of Customs is not equivalent to the questions being pending before any officer of Customs, Appellate Tribunal or any Court of Law.

1.28 In its regard, the applicant placed reliance on **M/s Spraytec India Ltd versus Directorate of Revenue Intelligence (2023) 4 Centax 211 (Del.)** wherein the Hon'ble Delhi High Court adjudicated on whether the classification concluded by Hon'ble Customs Authority of Advance Ruling (CAAR) was erroneous or not as the goods imported under the said CTHs were at the time detained at the port of import. It was held that the Order passed by Hon'ble CAAR, was valid as only summons had been issued and no pre-consultation notice or show cause notice had been issued by DRI or any other Authority. Hence, it would be erroneous to hold that the question of classification was pending before any Custom officer, Appellate Tribunal, or any Court. For ease of reference, the relevant extract of the case has been provided below:

"The proviso to Sub-Section (2) of 28-I of the Customs Act proscribes the CAAR from allowing any application filed for advance ruling, where question raised in the application is pending in the applicant's case before "any officer of customs, the Appellate Tribunal or any Court" or if the said question has already been decided by the Appellate Tribunal or any Court. In the present case, DRI had not issued any pre-consultation notice or show cause notice which would indicate that the question regarding classification of any goods was pending before DRI. Thus, even if it is accepted that an officer of DRI is an officer of Customs, it cannot be accepted that the question raised by the respondent in its application under section 28H of the Customs Act was pending 'in the applicant's case' before DRI. In order for a question to be considered as pending before any officer of customs, it would be necessary for the question to be raised in any notice enabling the assessee to respond to the said issue. It is only after this stage that it would be necessary for the officer of customs to render its decision on the question. Merely because an officer of customs contemplates that a question may arise, does not mean that the question is pending consideration. For a question to be stated to be pending, the concerned officer must formally set forth the same for the assessee to contest the same. Any preliminary exercise done by an officer of customs, to consider whether any question for consideration arises, would not preclude the CAAR from giving its advance ruling on that question. The possibility that a question would arise for consideration of a customs officer, appellate tribunal or court, is not a ground contemplated under clause (a) of the proviso to Section 28-I(2) of the Customs Act. Clearly, a distinction must be made between that question pending consideration and a possibility of a question arising consideration."

1.29 Additionally, they placed reliance on an advance ruling issued to **H.Q. Lamps Manufacturing Co. Ltd., (2023) 4 Centax 336 (A.A.R - Cus -Del.)** wherein CAAR, New Delhi opined that an investigation is considered pending before an officer when a show cause notice or pre-consultation notice has been issued. For ease of reference, the relevant extract of the case is provided below:

"13.6 On the basis of the careful examination of the relevant provisions of the Customs Act, Rules and CAAR Regulations, 2021, I am on the considered view that an application may be considered "pending" before any officer of customs only if it is pending before an officer in formal manner before an officer who is competent to answer the said question in terms of specific powers vested with the officer under the Customs Act, 1962. An illustrative list of such situations would include cases wherein a Show Cause Notice has been issued; bill of entry has been provisionally assessed under section 18 of the Act ibid; the matter is pending before the Special Valuation Branch of the Customs Commissioner for the purpose of valuation of the goods in question; or the proper officer has held the pre-notice consultation with the applicant in terms of the proviso of sub-section (a) of Section 28(1) of the Customs Act, 1962. Therefore, in cases, such as the extant case, wherein an officer of customs is engaged in an investigation that may result in formulation of a question that would be posed before another competent officer would not qualify as "pending before an officer"

13.7 In view of the above, I reject the contention of the Principal Commissioner of Customs (Preventive), New Delhi and allow the application for advance ruling in terms of Section 28-1 (2) of the Customs Act"

1.30 Hence, in the present context, it is the Applicant's submission that the questions raised by it in the present application are not pending before any officer of Customs, Appellate Tribunal or any Court of Law.

1.31 In light of the facts, relevant legal provisions and submissions made in the above paragraphs, the applicant prayed that :

- Confirm that the Product under consideration is classifiable under tariff entry 8504 50 90 as Other inductors; and
- Allow us to present our case in a personal hearing before your good-self prior to issuance of any Order.

Comments of the Port Commissionerate

2. As per the provision of CAAR Regulation, 2021, the complete application of the applicant was provided to the concerned Custom Commissionerate, and requested to furnish the requisite comments in the instant matter. The port authority vide its letter dated 17.04.2025 furnished its comments as follows:-

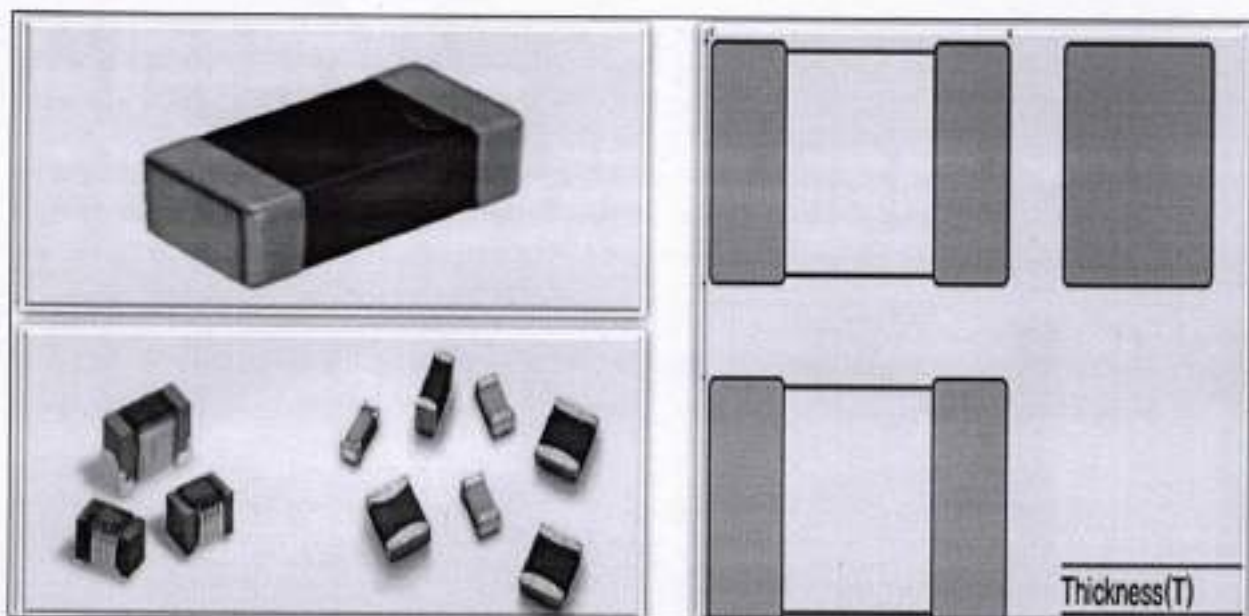
- 2.1 i. As the applicant is an IEC holder, they are eligible for filing the application for advance ruling in terms of section 28 E (c) (i) of the Customs Act, 1962.
- ii. Regarding whether the question on which advance ruling has been sought is (a) already pending in the applicant case before any officer of Customs, the appellate tribunal or any court or (b) same as in a manner decided already by the Appellate Tribunal or any court, based on the data available in this Commissionerate, it is neither pending before any officer of Customs, the appellate tribunal or any court nor decided already by the Appellate Tribunal or any court.
- iii. The claim of the applicant about nature of the activity appears to be importation of the goods under reference, which is ongoing.
- iv. Regarding merits of the issue, the comments by the concerned Customs Commissionerate, Chennai is as under:

Comments on the merits of the question raised by Port Commissionerate-

2.2 About the product

2.2.1 As described by the applicant:

- The product under consideration has been stated as Ferrite Beads consisting a total of 24 product numbers, consisting of tdk and murata brands.
- The images of the items is provided as under:



- Ferrite Beads are two terminal passive components made from ferrite.
- Ferrite bead is a device that typically consists of an insulated wire coiled into a coil, often around a magnetic core.
- Its operation is based on the principle of self-induction, an electrical phenomenon where a changing current induces a voltage within the coil itself.
- When AC signal pass through a ferrite bead, it exhibits inductive properties, opposing change in current. This creates a voltage drop across the bead that can filter out high-frequency noise while allowing lower frequencies to pass.
- Ferrite beads act as a high-frequency impedance, effectively blocking the passage of unwanted noise signals. They are strategically placed on power lines, signal lines etc., to mitigate the high frequency noise.
- Ferrite Beads are essential components in many electronic devices, contributing to efficient operation and enhanced performance by mitigating noise and improving inductive characteristics.

- The benefits of using ferrite beads in automobile electronics are improved electromagnetic compatibility, enhance signal integrity, reduced power supply noise and increased system reliability.
- The ferrite beads under consideration are going to be used in electronics items for automobiles such as ECUs, powertrains, body control modules, car multimedia systems, etc.

2.3. As available in the website of the supplier:

- Based on the models provided, it is understood from the websites of murata and tdk that the ferrite beads under reference are categorised under EMC products and further categorised as chip ferrite beads. These beads are ferrite bead inductors fabricated in the shape of chips which support surface mounting (SMD).
- From the website of murata, it is noticed that 'chip ferrite beads are typically noise-suppression component and are made by fabricating these ferrite bead inductors into chips.
- Coil patterns are formed between the layers of the sheets of raw ferrite, and by a process of integration and firing, a 3-dimensional coil structure is produced.
The diagram of the chip ferrite bead is shown as under:

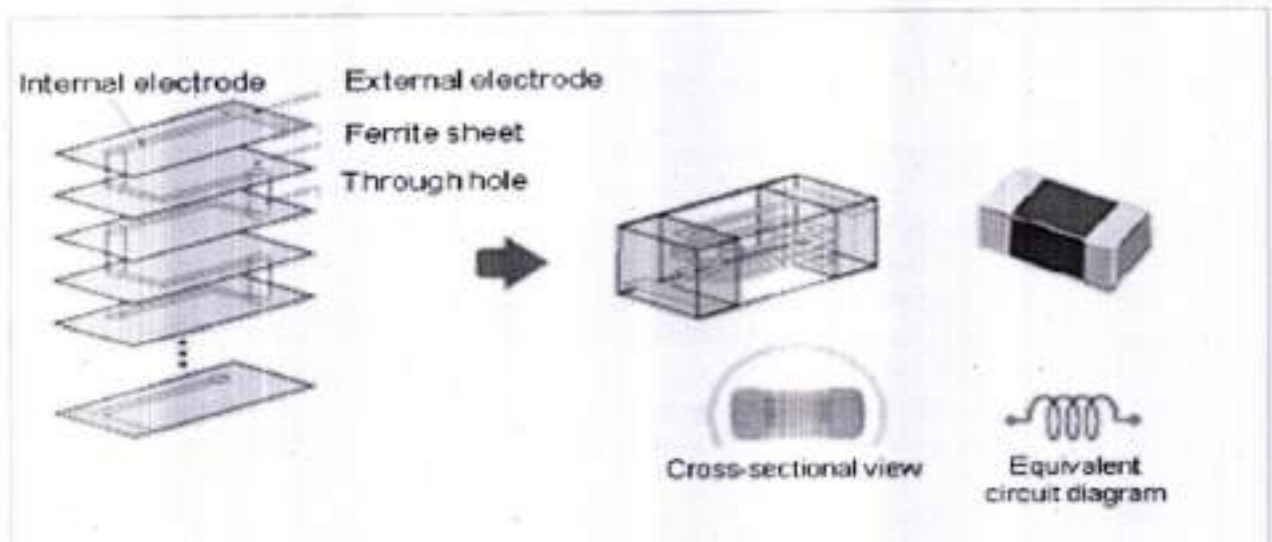


Fig 2 Example of structure of BLM series of chip ferrite beads

- By fabricating the ferrite bead inductors as chips and by adopting a coil structure inside them, it is possible to achieve a higher impedance than that of the lead type of ferrite bead inductor that simply has the lead through it. (In reality, some chip ferrite beads have only a lead passing through the bead) This structure is basically the same as that of a multilayer type of chip inductor, but the difference from an inductor lies in the fact that the ferrite material used is better suited to suppress noise.

2.4. Comments about the product:

It has been observed from both the submissions of the applicant as well as from the literature made available by the supplier / manufacturer in their websites that the products under consideration are chip Ferrite Beads, which are quite similar to that of coil based inductors in functioning. These inductors are used mainly for noise-suppression in the circuits, by acting as a high-frequency impedance.

About the classification:

2.4.1 As observed by the applicant:

- At present they are self-classifying these Ferrite Beads under CTI 8541 2900 as semiconductor devices, because of the similarities and commonalities of function with the semi-conductor based transistors. However, they understood that several industry participants are classifying it under CTI 8504 5090 as other inductors.
- Now, they understood that Ferrite bead is a passive component, which is used for filtering high-frequency noise and suppressing electromagnetic interference. While, transistors are active components, which are used for amplification, switching and signal modulation. Therefore, Ferrite beads cannot be considered as transistors and thus would be outside the purview of CTH 8541.
- CTH 8504 50 covers different type of inductors that are used to limit or prevent the flow of the alternate current. As the primary function of the Ferrite beads is to limit or prevent the flow of the AC current, they can be considered as other inductors falling under CTI 8504 5090.

2.5 Comments on classification:

2.5.1 The item Ferrite Bead or Chip Ferrite Bead is neither specifically reflected among any of the entries of the First Schedule to the Customs Tariff Act, 1975 nor mentioned in HSN Explanatory Notes. However, based on the details provided by the applicant and data available on the websites of the suppliers, it is noticed that the ferrite beads under consideration are fabricated as chip ferrite beads, by adopting the coil structure inside them. Thus, in respect of functionality these are quite similar to the functioning of coil based inductors. From the HSN Explanatory Notes to CTH 8504, it is noticed that Inductors consist essentially of a single coil of wire, and the Inductors obtained in the form of individual components by a printing process are classified under the heading 8504. The relevant portion of HSN Explanatory Notes to CTH 8504, is extracted below:

(III) INDUCTORS

These consist essentially of a single coil of wire which, inserted in an AC circuit, limits or prevents by its self-induction the flow of the AC. They vary from small chokes used in wireless circuits, instruments, etc., to large coils often mounted in concrete, used in power circuits (e.g., for limiting the flow of current in the event of a short circuit).

Inductors or inductances obtained in the form of individual components by a printing process remain classifiable in this heading.

Deflection coils for cathode-ray tubes are classified in heading 85.40

In view of the above, it is noticed that the Inductors under consideration, even though mainly used for the purpose of suppression of noise in circuits by acting as a high-frequency impedance, such activity of is being achieved based on the principle of self-induction. Therefore, in view of the HSN Explanatory Notes to CTH 8504, it appears that the functionality of the chip ferrite beads under consideration is included in the terms of heading 8504. Thus, in view of Rule 1 of the General Rules for Interpretation of Customs Tariff or HSN (GIR), they appear rightly classifiable under CTH 8504.

2.5.2. From the Customs Tariff Act, 1975, the grouping of articles under CTH 8504 is as under:

8504	Electrical transformers, static converters (for example, rectifiers) and inductors
8504 10	Ballasts for discharge lamps or tubes:
	Liquid dielectric transformers:
	Other transformers:
8504 40	Static converters:
8504 50	Other Inductors:
8504 50 10	Choke Coils (Chokes)
8504 50 90	Other
8504 90	Parts:
8504 90 10	Of transformers
8504 90 90	Other

2.6 In view of the above, it appears the ferrite beads under consideration, being chip ferrite beads having the functioning of Inductor as the principal and primary function, rightly classifiable under CTI 8504 5090.

2.7 In view of the above, the item under consideration viz 'Ferrite Beads' appear rightly classifiable under CTI 8504 5090.

Personal Hearing

3. The personal hearing in the matter was conducted on 01.05.2025 wherein the port authority i.e. Chennai- VII (Air Cargo) Customs Commissionerate and the authorized representative of the applicant attended the same. During the personal hearing, the authorized representative reaffirmed the points that had already been presented in the applicant's initial submission. Likewise, the port authority reiterated the arguments and details previously outlined in their formal response.

Analysis and Conclusion

4. After finding that the application is valid in terms of the provisions of the Customs Act, 1962 and the CAAR Regulations, 2021, having gone through CAAR-1 application, reply from jurisdictional Commissionerate, oral submissions made during the hearing and the legal framework governing the classification of proposed imports in the form of relevant Chapter notes, Section notes and HSN Explanatory Notes to the respective Chapter headings. I proceed to deliberate upon the issue on the basis of information available on record.

4.1 The issue involved is whether the impugned goods, namely, Ferrite Beads can merit classification under tariff item 8504 50 90 or 8541 29 00 of the Customs Tariff Act, 1975. In order to decide the same, it is imperative to examine both competing tariff items which covers following:-

HS Code	Level	Item Description
8504		ELECTRICAL TRANSFORMERS, STATIC CONVERTERS (FOR EXAMPLE, RECTIFIERS) AND INDUCTORS
8504 10	-	<i>Ballasts for discharge lamps or tubes:</i>
8504 10 10	---	Conventional type
8504 10 20	---	For compact fluorescent lamps
8504 10 90	---	Other
	-	<i>Liquid dielectric transformers:</i>
8504 21 00	--	Having a power handling capacity not exceeding 650 kVA
8504 22 00	--	Having a power handling capacity exceeding 650 kVA but not exceeding 10,000 kVA
8504 23	--	<i>Having a power handling capacity exceeding 10,000 kVA:</i>
8504 23 10	---	Having a power handling capacity exceeding 10,000 kVA but not exceeding 50,000 kVA
8504 23 20	---	Having a power handling capacity exceeding 50,000 kVA but not exceeding 1,00,000 kVA
8504 23 30	---	Having a power handling capacity exceeding 1,00,000 kVA but not exceeding 2,50,000 kVA
8504 23 40	---	Having a power handling capacity exceeding 2,50,000 kVA
	-	<i>Other transformers:</i>
8504 31 00	--	Having a power handling capacity not exceeding 1 kVA
8504 32 00	--	Having a power handling capacity exceeding 1 kVA but not exceeding 16 kVA
8504 33 00	--	Having a power handling capacity exceeding 16 kVA but not exceeding 500 kVA
8504 34 00	--	Having a power handling capacity exceeding 500 kVA
8504 40	-	<i>Static converters:</i>
8504 40 10	---	Electric inverter
	---	<i>Rectifier:</i>
8504 40 21	----	Dip bridge rectifier
8504 40 29	----	Other
8504 40 30	---	Battery chargers
8504 40 40	---	Voltage regulator and stabilizers (other than automatic)
8504 40 90	---	Other
8504 50	-	<i>Other inductors:</i>
8504 50 10	---	Choke coils (chokes)
8504 50 90	---	Other
8504 90	-	<i>Parts:</i>
8504 90 10	---	Of transformers
8504 90 90	---	Other
8541		SEMICONDUCTOR DEVICES (FOR EXAMPLE, DIODES, TRANSISTORS, SEMICONDUCTOR-BASED TRANSDUCERS); PHOTSENSITIVE SEMICONDUCTOR DEVICES, INCLUDING PHOTOVOLTAIC CELLS WHETHER OR NOT ASSEMBLED IN MODULES OR MADE UP INTO PANELS; LIGHT-EMITTING DIODES (LED), WHETHER OR NOT ASSEMBLED WITH OTHER LIGHT-EMITTING DIODES (LED); MOUNTED PIEZO-ELECTRIC CRYSTALS
8541 10 00	-	Diodes, other than photosensitive or light-emitting diodes (LED)
	-	<i>Transistors, other than photosensitive transistors:</i>
8541 21 00	--	With a dissipation rate of less than 1 W
8541 29 00	--	Other
8541 30	-	<i>Thyristors, diacs and triacs, other than photosensitive devices:</i>
8541 30 10	---	Thyristors
8541 30 90	---	Other
	-	<i>Photosensitive semiconductor devices, including photovoltaic cells whether or not assembled in modules or made up into panels; light-emitting diodes (LED) :</i>
8541 41 00	--	Light-emitting diodes (LED)
8541 42 00	--	Photovoltaic cells not assembled in modules or made up into panels
8541 43 00	--	Photovoltaic cells assembled in modules or made up into panels

8541 49 00	--	Other
	-	<i>Other semiconductor devices:</i>
8541 51 00	--	Semiconductor-based transducers
8541 59 00	--	Other
8541 60 00	-	Mounted piezo-electric crystals
8541 90 00	-	Parts

4.2 The relevant explanatory note to tariff heading 8504 are reproduced below:-

“(I) ELECTRICAL TRANSFORMERS

.....

(II) ELECTRICAL STATIC CONVERTERS

.....

(III) INDUCTORS

These consist essentially of a single coil of wire which, inserted in an AC circuit, limits or prevents by its self-induction the flow of the AC. They vary from small chokes used in wireless circuits, instruments, etc., to large coils often mounted in concrete, used in power circuits (e.g. for limiting the flow of current in the event of a short circuit). Inductors or inductances obtained in the form of individual components by a printing process remain classifiable in this heading. Deflection coils for cathode-ray tubes are classified in heading 85.40.”

4.3 The relevant explanatory note to tariff heading 8541 are reproduced below:-

“(IV) Other semiconductor devices

They include:

(1) Thyristors, consisting of four conductivity regions in semiconducting materials (three or more p n junctions) through which a direct current passes in a predetermined direction when a control pulse initiates conductivity. They are used as controlled rectifiers, as switches or as amplifiers and function as two interlocking, complementary transistors with a common collector/base junction.

(2) Triacs (bi-directional triode thyristors), consisting of five conductivity regions in semiconducting materials (four p n junctions) through which an alternating current passes when a control pulse initiates conductivity.

(3) Diacs, consisting of three conductivity regions in semiconducting materials (two pn junctions) and used to provide the pulses required to operate a triac.

(4) Varactors (or variable capacitance diodes).

(5) Field effect devices, such as gridistors.

(6) Gunn effect devices.

However, this group does not include semiconductor devices, which differ from those described above in that their operation depends primarily on temperature, pressure, etc., such as non-linear semiconductor resistors (thermistors, varistors, magneto resistors, etc.) (heading 85.33).

For photosensitive devices the operation of which depends on light rays (photodiodes, etc.), see group (B).

The devices described above fall in this heading whether presented mounted, that is to say, with their terminals or leads (for example pins, leads, balls, lands, bumps or pads mounted on a carrier, e.g., a substrate or a leadframe) or packaged (components), unmounted (elements) or even in the form of undiced discs (wafers). However, natural semiconductor materials (e.g., galena) are classified in this heading only when mounted.

The semiconductor-based transducers of this group, however, do not cover silicon based sensors, actuators, resonators, oscillators and combinations thereof, containing one or more monolithic, hybrid, multi-chip or multi-component integrated circuits as defined in Note 12 (b) (iv) (3) to this Chapter (heading 85.42).

The heading also excludes:

(a) Chemical elements (for example, silicon and selenium) doped for use in electronics, in forms unworked as drawn, or in the form of cylinders or rods (Chapter 28), when cut in the form of discs, wafers or similar forms (heading 38.18).

(b) Chemical compounds such as cadmium selenide and sulphide, indium arsenide, etc., containing certain additives (e.g., germanium, iodine) generally in a proportion of a few per cent, with a view to their use in electronics, whether in the form of cylinders, rods, etc., or cut into discs, wafers or similar forms (heading 38.18).

(c) Crystals doped for use in electronics, in the form of discs, wafers, or similar forms, polished or not, whether or not coated with a uniform epitaxial layer, provided they have not been selectively doped or diffused to create discrete regions (heading 38.18).

(d) Electronic integrated circuits (heading 85.42).

(e) Micro-assemblies of the moulded module, micromodule or similar types, consisting of discrete, active or both active and passive, components which are combined and interconnected (generally Chapters 84, 85 or 90)."

4.4 On perusal of the above tariff heading, it is aptly clear that tariff heading 8504 covers "ELECTRICAL TRANSFORMERS, STATIC CONVERTERS (FOR EXAMPLE, RECTIFIERS) AND INDUCTORS", sub heading 8504 50 covers "other inductor". On the other hand, tariff heading 8541 covers "SEMICONDUCTOR DEVICES (FOR EXAMPLE, DIODES, TRANSISTORS, SEMICONDUCTOR-BASED TRANSDUCERS); PHOTOSENSITIVE SEMICONDUCTOR DEVICES, INCLUDING PHOTOVOLTAIC CELLS WHETHER OR NOT ASSEMBLED IN

MODULES OR MADE UP INTO PANELS; LIGHT-EMITTING DIODES (LED), WHETHER OR NOT ASSEMBLED WITH OTHER LIGHT-EMITTING DIODES (LED); MOUNTED PIEZO-ELECTRIC CRYSTALS" and tariff item 8541 29 00 covers "other".

4.5 Upon examination of the Harmonized System Explanatory Notes to tariff heading 8541, it is observed that the said heading expressly excludes micro-assemblies of the moulded module, micromodule or similar types, consisting of discrete active components or both active and passive components which are combined and interconnected. Such micro-assemblies are properly classifiable under Chapters 84, 85 or 90, as the case may be. Further, as per Explanatory Notes to heading 8504, which provide that inductors consist essentially of a single coil of wire which, when inserted in an AC circuit, limits or prevents by its self-induction the flow of alternating current. These inductors may range from small chokes employed in wireless circuits and instruments to large coils frequently mounted in concrete for use in power circuits (for instance, for limiting current flow in the event of a short circuit). Notably, inductors or inductances manufactured as individual components through a printing process remain classifiable under this heading.

4.6 In the case at hand, it is observed that the applicant has furnished detailed specifications of the subject goods, supported by product catalogues and technical documentation. From the examination of these materials, it is established that the goods in question, namely "Ferrite Beads," constitute passive electronic components manufactured from ferrite material - a ceramic compound comprising iron oxide blended with other metallic elements. These components function as inductive noise suppression devices, effectively mitigating electromagnetic interference (EMI) and radio frequency interference (RFI) in electronic circuitry. The technical characteristics of the subject goods are noted as follows:

- (i) The components feature a two-terminal, surface-mountable design incorporating a coiled conductor wound around a ferrite core;
- (ii) Their operational principle relies on self-induction, generating impedance to attenuate high-frequency noise while permitting the passage of lower frequency signals;
- (iii) They demonstrate high magnetic permeability characteristics, enabling energy storage within the induced magnetic field during current flow.

4.7 I also note that the application of these goods is primarily observed in automotive electronic systems, including but not limited to:

- (i) Electronic Control Units (ECUs), where they serve to stabilize power and signal transmission for engine management and safety systems;
- (ii) Powertrain systems, contributing to noise reduction in fuel injection mechanisms, ignition systems, and electric motor drives;
- (iii) Body control modules, enhancing operational reliability in lighting, window regulation, and locking mechanisms;

- (iv) Multimedia and telematics systems, improving signal fidelity in automotive audio-visual applications.

4.8 Based on the evidence presented, it is concluded that "Ferrite Beads" constitute essential components for maintaining signal integrity and ensuring stable operation in contemporary automotive electronic systems. Further, the ferrite beads under consideration are fabricated as chip ferrite beads, by adopting the coil structure inside them. Thus, in respect of functionality these are quite similar to the functioning of coil based inductors.

4.9 Upon examination of the First Schedule to the Customs Tariff Act, 1975 and the Harmonized System Nomenclature (HSN) Explanatory Notes, it is observed that the product description 'Ferrite Bead' or 'Chip Ferrite Bead' is not specifically enumerated in any tariff entry. However, based on the technical specifications submitted by the applicant and corroborative evidence from manufacturers' documentation, it is established that the subject goods are manufactured as chip-type components incorporating an internal coil structure. The functional characteristics of these goods demonstrate substantial equivalence to conventional coil-based inductors. This finding is supported by the HSN Explanatory Notes to heading 8504, which define inductors as devices consisting essentially of a single coil of wire that limits alternating current through self-induction. The Notes further clarify that inductors produced as individual components, including those manufactured through printing processes, remain classifiable under this heading. Contrastingly, the Explanatory Notes to heading 8541 explicitly exclude micro-assemblies comprising combined active and passive components, which are instead classifiable under Chapters 84, 85 or 90. This exclusion reinforces the distinction between semiconductor devices under heading 8541 and inductive components properly classifiable under heading 8504. The classification of the inductors under CTH 8504 is duly supported by the following judicial pronouncements:

4.9.1 In the **Filtronics Ltd. vs. Collector of Central Excise [1989(43) E.L.T. (457)]** case, the court ruled that certain RF components, including inductors, chokes, peaking coils, AM/FM transformers, and oscillator and antenna coils, should be classified under tariff heading 85.04, not 85.29.

4.9.2 In the **Commissioner of C.Ex. vs Dhananjay Industrial Engineers [2007(208) E.L.T.(504)]** case, the court further ruled that the power supply equipments - Parts of DC power supply - Electric transformers, static converters, inductors, etc. - They are classifiable under sub-heading 8504.00 of Central Excise Tariff as specifically covered therein and not classifiable under Heading 85.48.

4.10 Further, I rely upon the decision of the Larger Bench of the Hon'ble Tribunal in the matter of **Saurashtra Chemical, Porbandar Vs. Collector of Customs, [1986 (23) E.L.T. 283 (Tri. -LB)]** had held that the tariffs must be interpreted in the light of relevant Section and Chapter Notes which are statutorily binding like the Headings themselves. Thus, the Section and Chapter Notes have an overriding force on the respective Headings. This judgment was approved by the Hon'ble Supreme Court of India in the case of **Saurashtra Chemicals Vs. Collector of Customs, [1997 (95) E.L.T. 455 (S.C.)]**.

4.11 In the case of *O. K. Play (India) Ltd. vs. C.C.E. Delhi III*, 2005 (180) E.L.T. 300 (S.C.), a 3-member bench of the Hon'ble Supreme Court of India made the following observations:

- (a) There cannot be a static parameter for correct classification.
- (b) HSN along with the explanatory notes provide a safe guide for interpretation of an Entry.
- (c) Functional utility, design, shape and predominant usage have also got to be taken into account while determining the classification of an item.
- (d) Aforementioned aids and assistance are more important than the names used in the trade or common parlance in the matter of correct classification.

4.12 It was held by the Hon'ble Supreme Court in *L.M.L Limited Vs. Commissioner of Customs*, [2010 (258) E.L.T. 321 (S.C.)] that in order to resolve a dispute on tariff classification, internationally accepted nomenclature emerging from HSN Explanatory Notes is a safe guide. Further, HSN Explanatory Notes are also dependable guide for interpretation of Customs Tariff. Some other judicial pronouncements wherein this proposition was also affirmed, upheld and followed have been enumerated below:

- i. *CC Vs. Gujarat Perstorp Electronics Ltd.*, [(2005) 7 SCC 118, (2005) 186 E.L.T. 532 (3-member S.C. bench)];
- ii. *CCE Vs. Phil. Corporation Ltd.*, [(2008) 223 E.L.T. 9 (S.C.)].

Therefore, the HSN Explanatory Notes are an important aid for ascertaining the classification of a good, in addition to the GRI and corresponding Chapter Notes and Section Notes.

4.13 In consideration of (i) The fundamental inductive properties of the subject goods; (ii) Their structural conformity with the HSN definition of inductors; (iii) The express exclusion of combined passive components from heading 8541; and (iv) The concurrence of the jurisdictional Commissionerate, I determine that the 'Ferrite Beads' in question appropriately merit classification under Customs Tariff Item (CTI) 8504 50 90, as they satisfy all essential characteristics of inductors as contemplated under the Harmonized System.

5. In view of the aforesaid, since the goods "Ferrite Beads" being chip ferrite beads having the functioning of Inductor as the principal and primary function, are rightly classifiable under CTI 8504 5090 of the First Schedule of the Customs Tariff Act, 1975.

6. I, rule accordingly.

शैलेश कुमार

(Shailesh Kumar)

Customs Authority for Advance Rulings, New Delhi

This copy is certified to be true copy of the ruling and is sent to: -

1. M/s Aptiv Component India Private Limited, Plot No, 7, Industrial Area, Dharuhera-122106, Dist. Rewari, Haryana, India
2. The Principal Commissioner of Customs, Chennai- VII (Air Cargo), New Customs House, Air Cargo Complex, Meenambakkam, Chennai- 600016
3. The Customs Authority for Advance Rulings, Mumbai, New Custom House, Ballard Estate, Mumbai-400001.
4. The Chief Commissioner (AR), Customs Excise & Service Tax Appellate Tribunal (CESTAT), West Block-2, Wing-2, R.K. Puram, New Delhi-110066.
5. The Principal Chief Commissioner of Customs, Delhi Customs Zone, New Custom House, IGI Airport Complex, New Delhi-110037.
6. Guard file.
7. Webmaster.

Harish
07/05/25

(Harish Kumar)

Additional Commissioner & Secretary,
Customs Authority for Advance Rulings, New Delhi