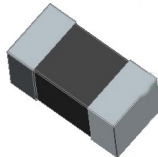


MFBA2V1608

Automotive multilayer chip ferrite bead



Product features

- AEC-Q200 qualified
- Multilayer monolithic construction yields high reliability
- 0603 (1608 metric) surface mount package
- Ultra-low direct current resistance (DCR)
- Impedance range: 30 ohms to 600 ohms
- Moisture sensitivity level (MSL): 1

Applications

- Body electronics (keyless entry, ECU, antennas)
- Advanced driver assistance systems (ADAS)
- Infotainment and cluster electronics
- Safety electronics systems
- WLAN, WiFi, Bluetooth
- Portable medical devices
- Inventory management equipment
- Displays/monitors
- IoT, remote monitoring
- Testing equipment
- Automation equipment
- Sensors

Environmental compliance and general specifications

- Operating temperature range: -55 °C to +150 °C (ambient plus self-temperature rise)
- Storage temperature (component): -55 °C to +150 °C
- Solder reflow temperature: J-STD-020 (latest revision) compliant



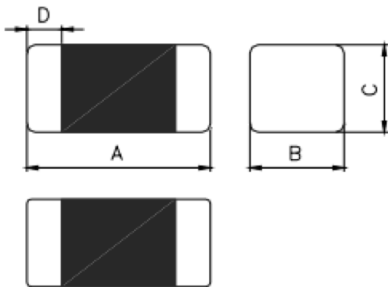
Product specifications

Part number ²	Impedance (Ω) 100 MHz, $\pm 25\%$, @ +25°C	DCR (Ω) maximum @ +25°C	Rated current ¹ (mA) maximum
MFBA2V1608-300-R	30	0.04	3000
MFBA2V1608-800-R	80	0.04	3000
MFBA2V1608-121-R	120	0.10	2000
MFBA2V1608-151-R	150	0.10	2000
MFBA2V1608-221-R	220	0.10	2000
MFBA2V1608-301-R	300	0.20	1000
MFBA2V1608-471-R	470	0.20	1000
MFBA2V1608-601-R	600	0.20	1000

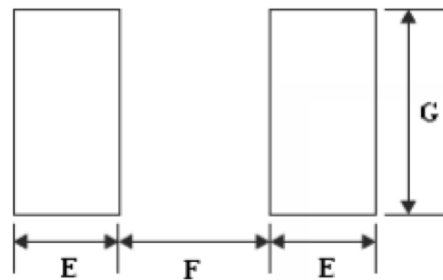
1. Rated current: Current rating for an approximate self-temperature rise of 40 °C or less.

2. Part number definition: MFBA2V1608-xxx-R
MFBA2V1608 = Product code and size
xxx = Impedance value in Ω , last character equals number of zeros
-R suffix = RoHS compliant

Mechanical parameters (mm)



Recommended pad layout



Schematic



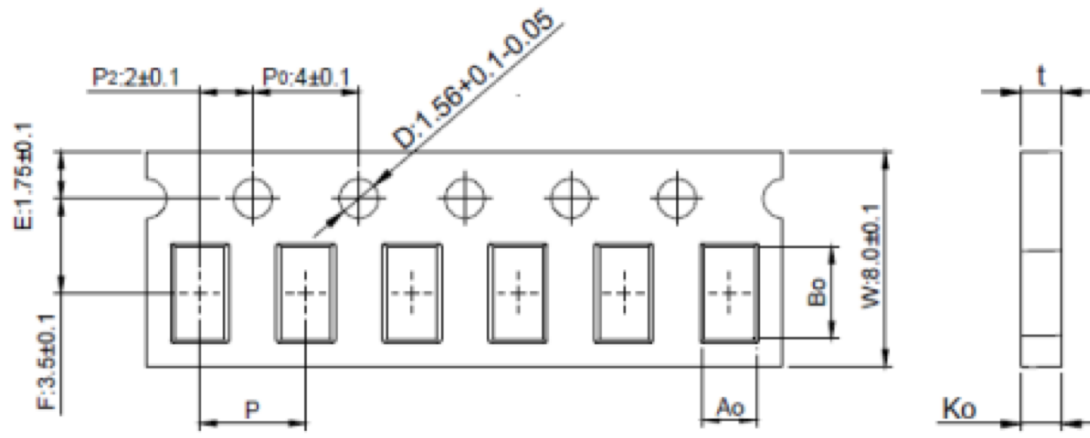
Part number	A	B	C	D	E (ref.)	F (ref.)	G (ref.)
MFBA2V1608-***-R	1.6 \pm 0.15	0.80 \pm 0.15	0.80 \pm 0.15	0.30 \pm 0.20	0.80	0.85	0.95

Part marking: No marking
All soldering surfaces to be coplanar within 0.1 millimeters
Tolerances are ± 0.1 millimeters unless stated otherwise
Pad layout dimensions are reference only
Traces or vias underneath the inductor is not recommended

Packaging information (mm)

Drawing not to scale

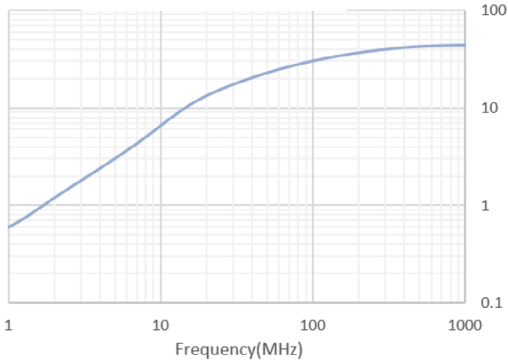
Supplied in tape and reel packaging, 4000 parts per 7" diameter reel (EIA-481 compliant)



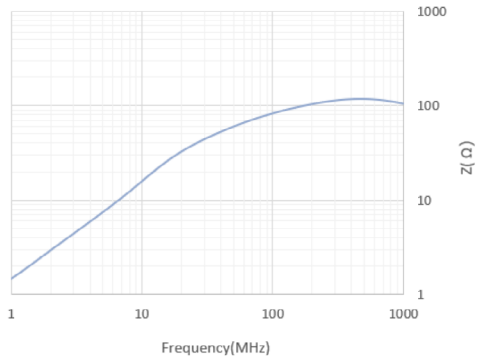
Bo	1.80 ± 0.05
Ao	0.96 + 0.05/-0.03
Ko	0.95 ± 0.05
P	4.0 ± 0.10
t	0.95 ± 0.05

Impedance vs frequency

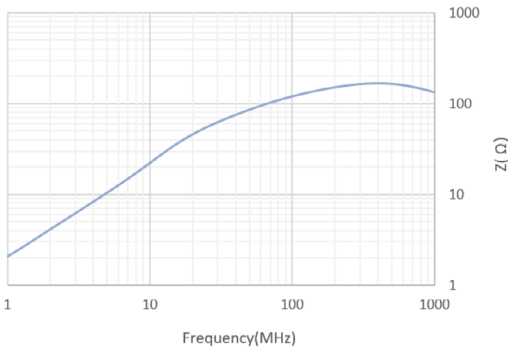
MFBA2V1608-300-R



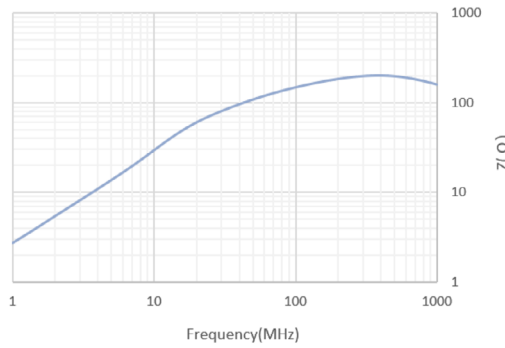
MFBA2V1608-800-R



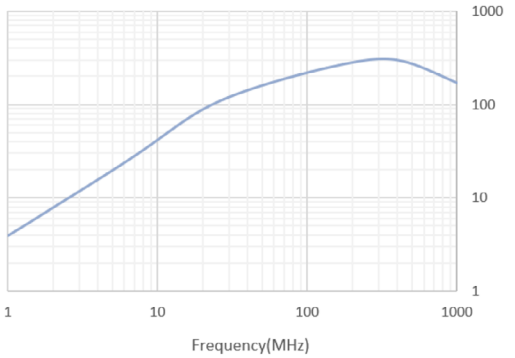
MFBA2V1608-121-R



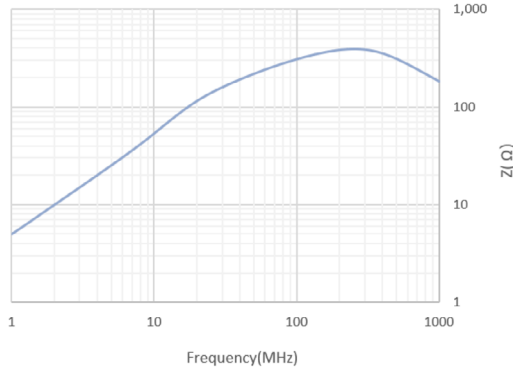
MFBA2V1608-151-R



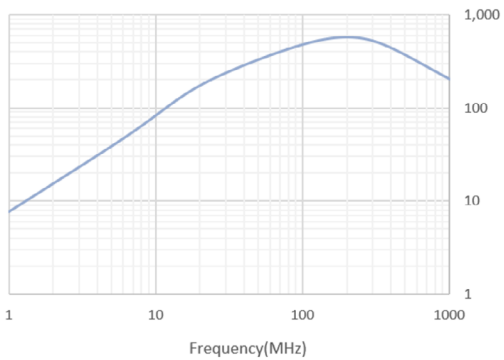
MFBA2V1608-221-R



MFBA2V1608-301-R



MFBA2V1608-471-R



MFBA2V1608-601-R

