

Automotive and Anti-Sulfuration Chip Resistor 0805



RoHS
Compliant

Description



The resistors are constructed in a high grade ceramic body (aluminium oxide). Internal metal electrodes are added at each end and connected by a resistive paste that is applied to the top surface of the substrate. The composition of the paste is adjusted to give the approximate resistance required and the value is trimmed to within tolerance by laser cutting of this resistive layer

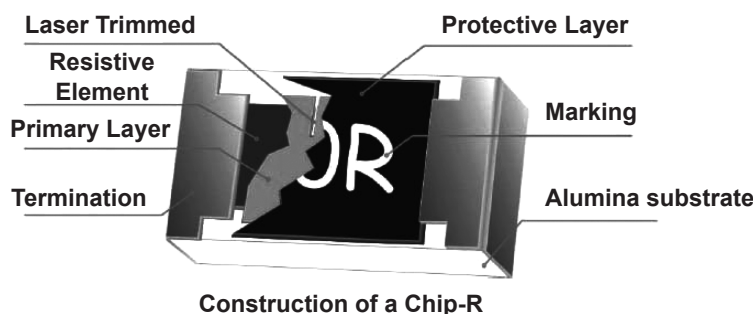
Features:

- High reliability and stability $\pm 1\%$
- Sulfuration resistant
- Automotive grade AEC Q-200 compliant
- 100% CCD inspection
- Lead-free

Applications:

- Automotive application
- Consumer electrical equipment
- EDP, computer application
- Telecom application

The resistive layer is covered with a protective coat. Finally, the two external end terminations are added. For ease of soldering the outer layer of these end terminations is a Tin (lead free) alloy



Quick Reference Data

Item	General Specification	
Series no.	MCMR08	
Size code	0805	
Resistance range	1 Ω to 10M Ω ($\pm 5\%$ tolerance), Jumper 1 Ω to 10M Ω ($\pm 1\%$ tolerance)	
Resistance tolerance	$\pm 1\%$ E96 / E24	$\pm 5\%$ E24
TCR (ppm/ $^{\circ}$ C) R > 1M Ω 10 Ω < R \leq 1M Ω R \leq 10 Ω	$\leq +200$ $\leq +100$ -200 to +400	
Maximum dissipation at T _{amb} = 70 $^{\circ}$ C	1/8W	
Maximum operation voltage (DC or RMS)	150V	
Maximum overload voltage (DC or RMS)	300V	
Climatic category (IEC 60068)	55/155/56	

www.element14.com
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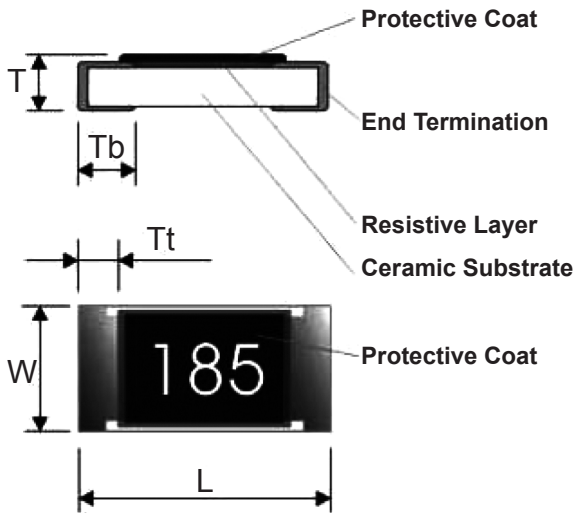
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Note:

1. This is the maximum voltage that may be continuously supplied to the resistor element, see “IEC publication 60115-8”
2. Maximum operation voltage : So called RCWV (rated continuous working voltage) is determined by

$$RCWV = \sqrt{\text{Rated Power} \times \text{Resistance Value}}$$
or maximum RCWV listed above, whichever is lower
3. The resistance of jumper is defined $< 0.05\Omega$



Dimensions (mm)

MCMR08 (0805)	L	W	T	Tb	Tt
	2 ±0.1	1.25 ±0.1	0.5 ±0.15	0.4 ±0.2	0.4 ±0.2

Marking

Size \ No. of Digit of Code \ Tolerance	±5%	±1%
MCMR08 (0805)	3-digits marking	4-digits marking

3-digits marking (±5% : 0805)

Each resistor is marked with a three digits code on the protective coating to designate the nominal resistance value

4-digits marking (±1% : 0805)

Each resistor is marked with a three digits code on the protective coating to designate the nominal resistance value

Example

Resistance	10Ω	12Ω	100Ω	6,800Ω	47,000Ω
3-digits marking (0805 ±5%)	100	120	101	682	473
4-digits marking	10R0	12R0	1,000	6,801	4,702



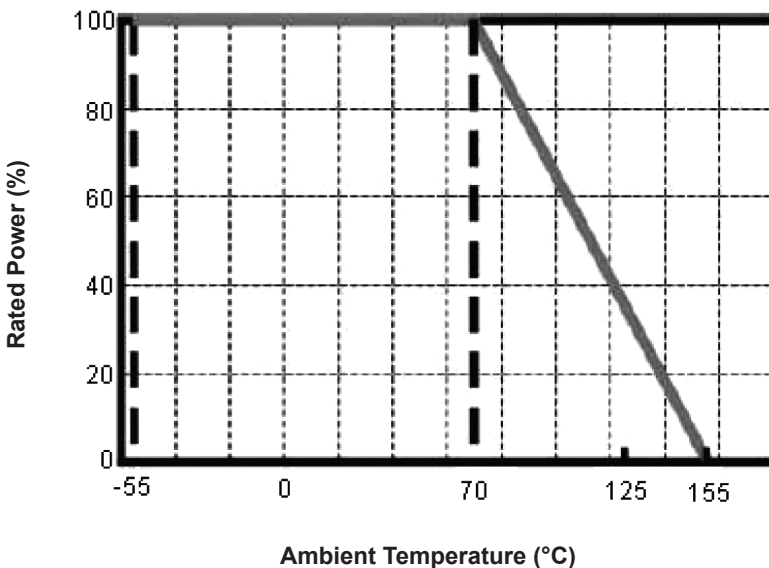
Functional Description

Product characterization

Standard values of nominal resistance are taken from the E24 series for resistors with a tolerance of $\pm 5\%$, and E24+E96 series for resistors with a tolerance of $\pm 1\%$. The values of the E24 / E96 series are in accordance with "IEC publication 60063"

Derating

The power that the resistor can dissipate depends on the operating temperature



Max. dissipation in percentage of rated power as a function of the ambient temperature

Mounting:

Due to their rectangular shapes and small tolerances, surface mountable resistors are suitable for handling by automatic placement systems

Chip placement can be on ceramic substrates and printed-circuit boards (PCBs)

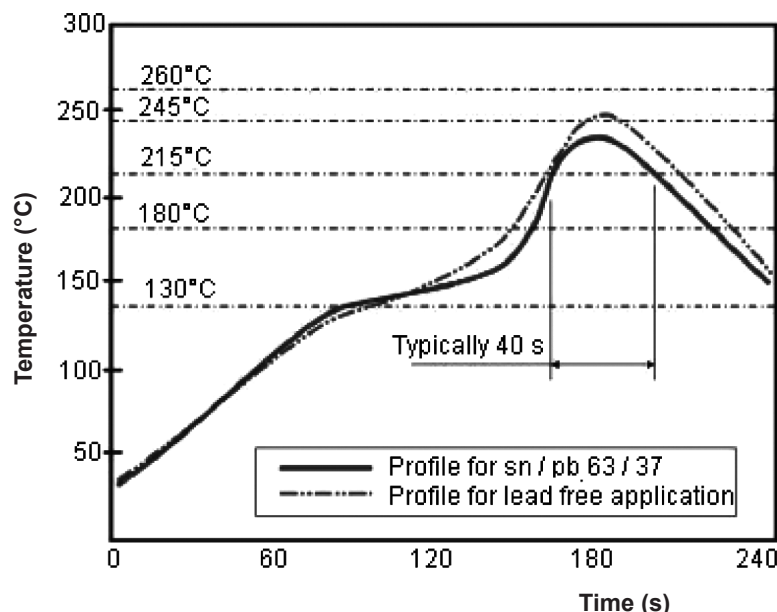
Electrical connection to the circuit is by individual soldering condition

The end terminations guarantee a reliable contact

Soldering Condition

The robust construction of chip resistors allows them to be completely immersed in a solder bath of 260°C for 10 seconds. Therefore, it is possible to mount surface mount resistors on one side of a PCB and other discrete components on the reverse (mixed PCBs)

Surface mount resistors are tested for solderability at 235°C during 2 seconds. The test condition for no leaching is 260°C for 30 seconds. Typical examples of soldering processes that provide reliable joints without any damage are given in below.



Infrared soldering profile for Chip Resistors

Test and Requirements

Essentially all tests are carried out according to the schedule of IEC publication 115-8, category LCT/UCT/56 (rated temperature range : Lower Category Temperature, Upper Category Temperature; damp heat, long term, 56 days). The testing also meets the requirements specified by EIA, EIAJ and JIS

The tests are carried out in accordance with IEC publication 68, "Recommended basic climatic and mechanical robustness testing procedure for electronic components" and under standard atmospheric conditions according to IEC 60068-1, sub-clause 5.3. Unless otherwise specified, the following value supplied :

Temperature : 15°C to 35°C

Relative humidity : 45% to 75%

Air pressure : 86kPa to 106kPa (860 mbar to 1,060 mbar)

All soldering tests are performed with mildly activated flux

Test and Requirements

Test	Procedure / Test Method	Requirement	
		Resistance $\pm 5\%$, $\pm 1\%$	0 Ω
Electrical Characteristics JISC5201-1: 1998 Clause 4.8	- DC resistance values measurement - Temperature Coefficient of Resistance (T.C.R) Natural resistance change per change in degree centigrade $\frac{R2 - R1}{R1 (t2 - t1)} \times 10^6 \text{ (ppm/}^\circ\text{C)}$ $t_1 : 20^\circ\text{C } +5^\circ\text{C } -1^\circ\text{C}$ R1 : Resistance at reference temperature R2 : Resistance at test temperature	Within the specified tolerance Refer to "Quick Reference Data"	
Resistance to soldering heat (R.S.H) MIL-STD-202 method 210	Un-mounted chips completely immersed for 10 ± 1 second in a SAC solder bath at $270^\circ\text{C } \pm 5^\circ\text{C}$	$\Delta R/R$ Max. $\pm (0.5\% + 0.05\Omega)$ No visible damage	< 50m Ω
Solderability J-STD-002	a) Bake the sample for 155°C dwell time 4 hours / solder dipping $235^\circ\text{C} / 5$ s b) Steam the sample dwell time 1 hour/ solder dipping $215^\circ\text{C} / 5$ s c) Steam the sample dwell time 1 hour/ solder dipping $260^\circ\text{C} / 7$ s	95% coverage minimum, good tinning No visible damage	
Temperature cycling JESD22 method JA-104	1,000 cycles, -55°C to $+155^\circ\text{C}$, dwell time 5 to 10mins	$\Delta R/R$ Max. $\pm (0.5\% + 0.05\Omega)$ No visible damage	< 50m Ω
Moisture Resistance MIL-STD-202 method 106	$65 \pm 2^\circ\text{C}$, 80 to 100% RH, 10 cycles, 24 hours / cycle	$\Delta R/R$ Max. $\pm (0.5\% + 0.05\Omega)$ No visible damage	< 50m Ω
Bias Humidity MIL-STD-202 method 103	1,000 +48/-0 hours; 85°C , 85% RH, 10% of operation Power	$\Delta R/R$ Max. $\pm (1\% + 0.05\Omega)$ No visible damage	< 50m Ω
Operational Life MIL-STD-202 method 108	1,000 +48/-0 hours; 35% of operation power, $125 \pm 2^\circ\text{C}$	$\Delta R/R$ Max. $\pm (1\% + 0.05 \Omega)$ No visible damage	< 50m Ω
High Temperature Exposure MIL-STD-202 method 108	1,000+48/-0 hours; without load in a temperature chamber controlled $155 \pm 3^\circ\text{C}$	$\Delta R/R$ Max. $\pm (1\% + 0.05 \Omega)$ No visible damage	< 50m Ω
Mechanical Shock MIL-STD-202 method 213	1/2 sine pulse / 1,500 g peak / Velocity 15.4 ft/s	Within the specified tolerance No visible damage	< 50m Ω
Board Flex AEC-Q200-005	Resistors mounted on a 90 mm glass epoxy resin PCB(FR4), bending once 2 mm for 10 s	$\Delta R/R$ Max. $\pm (1\% + 0.05 \Omega)$ No visible damage	< 50m Ω
Terminal strength AEC-Q200-006	Pressurizing force: 1 Kg, Test time: 60 ± 1 s	No remarkable damage or removal of the terminations	
Vibration MIL-STD-202 method 204	Test 5 g's for 20 minimum, 12 cycles each of 3 orientations	$\Delta R/R$ Max. $\pm (1\% + 0.05 \Omega)$ No visible damage	< 50m Ω
Thermal shock MIL-STD-202 method 107	Test -55 to 155 / dwell time 15 minimum / maximum transfer time 20 seconds 300 cycles	$\Delta R/R$ Max. $\pm (0.5\% + 0.05 \Omega)$ No visible damage	< 50m Ω
ESD AEC-Q200-002	Test contact 1 KV (0.5 KV for 0402 only)	$\Delta R/R$ Max. $\pm (1\% + 0.05 \Omega)$ No visible damage	< 50m Ω

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Test Condition for Jumper (0Ω)

Item	MCMR08 (0805)
Power rating at +70°C	1/8 W
Resistance	Max. 50mΩ
Rated current	1.5A
Peak current	3.5A
Operating temperature	-55°C to +155°C

MCMR08 (0805):

1. Reeled tape packaging : 8 mm width paper taping 5,000 pieces per 7" reel, 10 k pieces per 10" reel, 20 k pieces per 13" reel
2. Bulk packaging : 5,000 pieces per poly-bag

Part Number Table

Description	Part Number
Resistor, 0805, 10M, 1%, Anti Sulfur	MCMR08W1005FTL
Resistor, 0805, 1M07, 1%, Anti Sulfur	MCMR08W1074FTL
Resistor, 0805, 1M2, 1%, Anti Sulfur	MCMR08W1204FTL
Resistor, 0805, 1M62, 1%, Anti Sulfur	MCMR08W1624FTL
Resistor, 0805, 1R, 1%, Anti Sulfur	MCMR08W1R00FTL
Resistor, 0805, 1R6, 1%, Anti Sulfur	MCMR08W1R60FTL
Resistor, 0805, 2M2, 1%, Anti Sulfur	MCMR08W2204FTL
Resistor, 0805, 3M, 1%, Anti Sulfur	MCMR08W3004FTL
Resistor, 0805, 3R4, 1%, Anti Sulfur	MCMR08W3R40FTL
Resistor, 0805, 4M53, 1%, Anti Sulfur	MCMR08W4534FTL
Resistor, 0805, 4R32, 1%, Anti Sulfur	MCMR08W4R32FTL
Resistor, 0805, 4R7, 1%, Anti Sulfur	MCMR08W4R70FTL
Resistor, 0805, 5R6, 1%, Anti Sulfur	MCMR08W5R60FTL
Resistor, 0805, 8R25, 1%, Anti Sulfur	MCMR08W8R25FTL
Resistor, 0805, 0R, Anti Sulfuration	MCMR08X000 PTL
Resistor, 10R, 0805, 5%, Anti Sulfur	MCMR08X100 JTL
Resistor, 0805, 100R, 1%, Anti Sulfur	MCMR08X1000FTL
Resistor, 0805, 1K, 1%, Anti Sulfur	MCMR08X1001FTL
Resistor, 0805, 10K, 1%, Anti Sulfur	MCMR08X1002FTL
Resistor, 100K, 125MW, 1%, Anti Sulphur	MCMR08X1003FTL
Resistor, 0805, 1M, 1%, Anti Sulfur	MCMR08X1004FTL

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Description	Part Number
Resistor, 100R, 0805, 5%, Anti Sulfur	MCMR08X101 JTL
Resistor, 1K, 0805, 5%, Anti Sulfur	MCMR08X102 JTL
Resistor, 10K, 125MW, 5%, Anti Sulphur	MCMR08X103 JTL
Resistor, 100K, 0805, 5%, Anti Sulfur	MCMR08X104 JTL
Resistor, 1M, 0805, 5%, Anti Sulfur	MCMR08X105 JTL
Resistor, 0805, 10R, 1%, Anti Sulfur	MCMR08X10R0FTL
Resistor, 0805, 11K, 1%, Anti Sulfur	MCMR08X1102FTL
Resistor, 0805, 110K, 1%, Anti Sulfur	MCMR08X1103FTL
Resistor, 110K, 0805, 5%, Anti Sulfur	MCMR08X114 JTL
Resistor, 0805, 115K, 1%, Anti Sulfur	MCMR08X1153FTL
Resistor, 0805, 118R, 1%, Anti Sulfur	MCMR08X1180FTL
Resistor, 0805, 118K, 1%, Anti Sulfur	MCMR08X1183FTL
Resistor, 12R, 0805, 5%, Anti Sulfur	MCMR08X120 JTL
Resistor, 0805, 120R, 1%, Anti Sulfur	MCMR08X1200FTL
Resistor, 0805, 12K, 1%, Anti Sulfur	MCMR08X1202FTL
Resistor, 0805, 120K, 1%, Anti Sulfur	MCMR08X1203FTL
Resistor, 120R, 0805, 5%, Anti Sulfur	MCMR08X121 JTL
Resistor, 1K2, 0805, 5%, Anti Sulfur	MCMR08X122 JTL
Resistor, 12K, 0805, 5%, Anti Sulfur	MCMR08X123 JTL
Resistor, 0805, 12K4, 1%, Anti Sulfur	MCMR08X1242FTL
Resistor, 0805, 12K7, 1%, Anti Sulfur	MCMR08X1272FTL
Resistor, 0805, 127K, 1%, Anti Sulfur	MCMR08X1273FTL
Resistor, 0805, 12R, 1%, Anti Sulfur	MCMR08X12R0FTL
Resistor, 0805, 130R, 1%, Anti Sulfur	MCMR08X1300FTL
Resistor, 0805, 13K3, 1%, Anti Sulfur	MCMR08X1332FTL
Resistor, 0805, 133K, 1%, Anti Sulfur	MCMR08X1333FTL
Resistor, 130K, 0805, 5%, Anti Sulfur	MCMR08X134 JTL
Resistor, 0805, 140R, 1%, Anti Sulfur	MCMR08X1400FTL
Resistor, 0805, 14K, 1%, Anti Sulfur	MCMR08X1402FTL
Resistor, 0805, 140K, 1%, Anti Sulfur	MCMR08X1403FTL
Resistor, 0805, 14K7, 1%, Anti Sulfur	MCMR08X1472FTL
Resistor, 0805, 1K5, 1%, Anti Sulfur	MCMR08X1501FTL
Resistor, 0805, 15K, 1%, Anti Sulfur	MCMR08X1502FTL
Resistor, 0805, 150K, 1%, Anti Sulfur	MCMR08X1503FTL
Resistor, 1K5, 0805, 5%, Anti Sulfur	MCMR08X152 JTL
Resistor, 15K, 0805, 5%, Anti Sulfur	MCMR08X153 JTL

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Description	Part Number
Resistor, 0805, 160R, 1%, Anti Sulfur	MCMR08X1600FTL
Resistor, 0805, 16K, 1%, Anti Sulfur	MCMR08X1602FTL
Resistor, 0805, 160K, 1%, Anti Sulfur	MCMR08X1603FTL
Resistor, 0805, 162K, 1%, Anti Sulfur	MCMR08X1623FTL
Resistor, 160K, 0805, 5%, Anti Sulfur	MCMR08X164 JTL
Resistor, 0805, 16K5, 1%, Anti Sulfur	MCMR08X1652FTL
Resistor, 0805, 165K, 1%, Anti Sulfur	MCMR08X1653FTL
Resistor, 0805, 1K69, 1%, Anti Sulfur	MCMR08X1691FTL
Resistor, 0805, 16K9, 1%, Anti Sulfur	MCMR08X1692FTL
Resistor, 0805, 169K, 1%, Anti Sulfur	MCMR08X1693FTL
Resistor, 0805, 16R9, 1%, Anti Sulfur	MCMR08X16R9FTL
Resistor, 0805, 1K74, 1%, Anti Sulfur	MCMR08X1741FTL
Resistor, 0805, 17R4, 1%, Anti Sulfur	MCMR08X17R4FTL
Resistor, 18R, 0805, 5%, Anti Sulfur	MCMR08X180 JTL
Resistor, 0805, 1K8, 1%, Anti Sulfur	MCMR08X1801FTL
Resistor, 0805, 18K, 1%, Anti Sulfur	MCMR08X1802FTL
Resistor, 0805, 180K, 1%, Anti Sulfur	MCMR08X1803FTL
Resistor, 180R, 0805, 5%, Anti Sulfur	MCMR08X181 JTL
Resistor, 1K8, 0805, 5%, Anti Sulfur	MCMR08X182 JTL
Resistor, 0805, 18K2, 1%, Anti Sulfur	MCMR08X1822FTL
Resistor, 0805, 182K, 1%, Anti Sulfur	MCMR08X1823FTL
Resistor, 18K, 0805, 5%, Anti Sulfur	MCMR08X183 JTL
Resistor, 0805, 18K7, 1%, Anti Sulfur	MCMR08X1872FTL
Resistor, 0805, 187K, 1%, Anti Sulfur	MCMR08X1873FTL
Resistor, 0805, 18R2, 1%, Anti Sulfur	MCMR08X18R2FTL
Resistor, 0805, 196R, 1%, Anti Sulfur	MCMR08X1960FTL
Resistor, 0805, 19K6, 1%, Anti Sulfur	MCMR08X1962FTL
Resistor, 0805, 196K, 1%, Anti Sulfur	MCMR08X1963FTL
Resistor, 0805, 200R, 1%, Anti Sulfur	MCMR08X2000FTL
Resistor, 0805, 2K, 1%, Anti Sulfur	MCMR08X2001FTL
Resistor, 0805, 20K, 1%, Anti Sulfur	MCMR08X2002FTL
Resistor, 0805, 200K, 1%, Anti Sulfur	MCMR08X2003FTL
Resistor, 2K, 0805, 5%, Anti Sulfur	MCMR08X202 JTL
Resistor, 20K, 0805, 5%, Anti Sulfur	MCMR08X203 JTL
Resistor, 200K, 0805, 5%, Anti Sulfur	MCMR08X204 JTL
Resistor, 0805, 2K1, 1%, Anti Sulfur	MCMR08X2101FTL

Automotive and Anti-Sulfuration Chip Resistor 0805



Description	Part Number
Resistor, 0805, 2K2, 1%, Anti Sulfur	MCMR08X2201FTL
Resistor, 0805, 22K, 1%, Anti Sulfur	MCMR08X2202FTL
Resistor, 0805, 220K, 1%, Anti Sulfur	MCMR08X2203FTL
Resistor, 220R, 0805, 5%, Anti Sulfur	MCMR08X221 JTL
Resistor, 0805, 2K21, 1%, Anti Sulfur	MCMR08X2211FTL
Resistor, 0805, 221K, 1%, Anti Sulfur	MCMR08X2213FTL
Resistor, 2K2, 0805, 5%, Anti Sulfur	MCMR08X222 JTL
Resistor, 22K, 0805, 5%, Anti Sulfur	MCMR08X223 JTL
Resistor, 220K, 0805, 5%, Anti Sulfur	MCMR08X224 JTL
Resistor, 2M2, 0805, 5%, Anti Sulfur	MCMR08X225 JTL
Resistor, 0805, 22R, 1%, Anti Sulfur	MCMR08X22R0FTL
Resistor, 0805, 22R1, 1%, Anti Sulfur	MCMR08X22R1FTL
Resistor, 0805, 240R, 1%, Anti Sulfur	MCMR08X2400FTL
Resistor, 0805, 2K4, 1%, Anti Sulfur	MCMR08X2401FTL
Resistor, 24K, 0805, 5%, Anti Sulfur	MCMR08X243 JTL
Resistor, 0805, 24K3, 1%, Anti Sulfur	MCMR08X2432FTL
Resistor, 0805, 24K9, 1%, Anti Sulfur	MCMR08X2492FTL
Resistor, 0805, 249K, 1%, Anti Sulfur	MCMR08X2493FTL
Resistor, 0805, 25K5, 1%, Anti Sulfur	MCMR08X2552FTL
Resistor, 0805, 2K67, 1%, Anti Sulfur	MCMR08X2671FTL
Resistor, 27R, 0805, 5%, Anti Sulfur	MCMR08X270 JTL
Resistor, 0805, 2K7, 1%, Anti Sulfur	MCMR08X2701FTL
Resistor, 0805, 27K, 1%, Anti Sulfur	MCMR08X2702FTL
Resistor, 0805, 270K, 1%, Anti Sulfur	MCMR08X2703FTL
Resistor, 270R, 0805, 5%, Anti Sulfur	MCMR08X271 JTL
Resistor, 2K7, 0805, 5%, Anti Sulfur	MCMR08X272 JTL
Resistor, 27K, 0805, 5%, Anti Sulfur	MCMR08X273 JTL
Resistor, 270K, 0805, 5%, Anti Sulfur	MCMR08X274 JTL
Resistor, 0805, 274R, 1%, Anti Sulfur	MCMR08X2740FTL
Resistor, 0805, 27K4, 1%, Anti Sulfur	MCMR08X2742FTL
Resistor, 0805, 28K, 1%, Anti Sulfur	MCMR08X2802FTL
Resistor, 0805, 294R, 1%, Anti Sulfur	MCMR08X2940FTL
Resistor, 0805, 2K94, 1%, Anti Sulfur	MCMR08X2941FTL
Resistor, 0805, 294K, 1%, Anti Sulfur	MCMR08X2943FTL
Resistor, 2R7, 0805, 5%, Anti Sulfur	MCMR08X2R7 JTL
Resistor, 0805, 300R, 1%, Anti Sulfur	MCMR08X3000FTL

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Description	Part Number
Resistor, 0805, 3K, 1%, Anti Sulfur	MCMR08X3001FTL
Resistor, 0805, 30K, 1%, Anti Sulfur	MCMR08X3002FTL
Resistor, 0805, 300K, 1%, Anti Sulfur	MCMR08X3003FTL
Resistor, 300R, 0805, 5%, Anti Sulfur	MCMR08X301 JTL
Resistor, 3K, 0805, 5%, Anti Sulfur	MCMR08X302 JTL
Resistor, 30K, 0805, 5%, Anti Sulfur	MCMR08X303 JTL
Resistor, 300K, 0805, 5%, Anti Sulfur	MCMR08X304 JTL
Resistor, 0805, 3K16, 1%, Anti Sulfur	MCMR08X3161FTL
Resistor, 0805, 324R, 1%, Anti Sulfur	MCMR08X3240FTL
Resistor, Anti Sulfur, 33R, 0805, 5%	MCMR08X330 JTL
Resistor, 0805, 330R, 1%, Anti Sulfur	MCMR08X3300FTL
Resistor, 0805, 33K, 1%, Anti Sulfur	MCMR08X3302FTL
Resistor, 0805, 330K, 1%, Anti Sulfur	MCMR08X3303FTL
Resistor, 330R, 0805, 5%, Anti Sulfur	MCMR08X331 JTL
Resistor, 3K3, 0805, 5%, Anti Sulfur	MCMR08X332 JTL
Resistor, 0805, 3K32, 1%, Anti Sulfur	MCMR08X3321FTL
Resistor, 0805, 33K2, 1%, Anti Sulfur	MCMR08X3322FTL
Resistor, 0805, 332K, 1%, Anti Sulfur	MCMR08X3323FTL
Resistor, 33K, 0805, 5%, Anti Sulfur	MCMR08X333 JTL
Resistor, 330K, 0805, 5%, Anti Sulfur	MCMR08X334 JTL
Resistor, 0805, 34K, 1%, Anti Sulfur	MCMR08X3402FTL
Resistor, 36R, 0805, 5%, Anti Sulfur	MCMR08X360 JTL
Resistor, 0805, 3K6, 1%, Anti Sulfur	MCMR08X3601FTL
Resistor, 0805, 36K, 1%, Anti Sulfur	MCMR08X3602FTL
Resistor, 0805, 374K, 1%, Anti Sulfur	MCMR08X3743FTL
Resistor, 0805, 3K83, 1%, Anti Sulfur	MCMR08X3831FTL
Resistor, 0805, 390R, 1%, Anti Sulfur	MCMR08X3900FTL
Resistor, 0805, 3K9, 1%, Anti Sulfur	MCMR08X3901FTL
Resistor, 0805, 39K, 1%, Anti Sulfur	MCMR08X3902FTL
Resistor, 3K9, 0805, 5%, Anti Sulfur	MCMR08X392 JTL
Resistor, 0805, 3K92, 1%, Anti Sulfur	MCMR08X3921FTL
Resistor, 39K, 0805, 5%, Anti Sulfur	MCMR08X393 JTL
Resistor, 0805, 39R2, 1%, Anti Sulfur	MCMR08X39R2FTL
Resistor, 3R9, 0805, 5%, Anti Sulfur	MCMR08X3R9 JTL
Resistor, 0805, 4K02, 1%, Anti Sulfur	MCMR08X4021FTL
Resistor, 0805, 40K2, 1%, Anti Sulfur	MCMR08X4022FTL

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Description	Part Number
Resistor, 0805, 41K2, 1%, Anti Sulfur	MCMR08X4122FTL
Resistor, 0805, 4K32, 1%, Anti Sulfur	MCMR08X4321FTL
Resistor, 0805, 43R, 1%, Anti Sulfur	MCMR08X43R0FTL
Resistor, 0805, 44K2, 1%, Anti Sulfur	MCMR08X4422FTL
Resistor, 0805, 45K3, 1%, Anti Sulfur	MCMR08X4532FTL
Resistor, 0805, 45R3, 1%, Anti Sulfur	MCMR08X45R3FTL
Resistor, 47R, 0805, 5%, Anti Sulfur	MCMR08X470 JTL
Resistor, 0805, 470R, 1%, Anti Sulfur	MCMR08X4700FTL
Resistor, 0805, 4K7, 1%, Anti Sulfur	MCMR08X4701FTL
Resistor, 0805, 47K, 1%, Anti Sulfur	MCMR08X4702FTL
Resistor, 0805, 470K, 1%, Anti Sulfur	MCMR08X4703FTL
Resistor, 470R, 0805, 5%, Anti Sulfur	MCMR08X471 JTL
Resistor, 4K7, 0805, 5%, Anti Sulfur	MCMR08X472 JTL
Resistor, 47K, 0805, 5%, Anti Sulfur	MCMR08X473 JTL
Resistor, 470K, 0805, 5%, Anti Sulfur	MCMR08X474 JTL
Resistor, 0805, 47R, 1%, Anti Sulfur	MCMR08X47R0FTL
Resistor, 0805, 487K, 1%, Anti Sulfur	MCMR08X4873FTL
Resistor, 0805, 499R, 1%, Anti Sulfur	MCMR08X4990FTL
Resistor, 0805, 499K, 1%, Anti Sulfur	MCMR08X4993FTL
Resistor, 0805, 49R9, 1%, Anti Sulfur	MCMR08X49R9FTL
Resistor, 4R7, 0805, 5%, Anti Sulfur	MCMR08X4R7 JTL
Resistor, 51R, 0805, 5%, Anti Sulfur	MCMR08X510 JTL
Resistor, 0805, 510R, 1%, Anti Sulfur	MCMR08X5100FTL
Resistor, 0805, 5K1, 1%, Anti Sulfur	MCMR08X5101FTL
Resistor, 0805, 51K, 1%, Anti Sulfur	MCMR08X5102FTL
Resistor, 510R, 0805, 5%, Anti Sulfur	MCMR08X511 JTL
Resistor, 0805, 5K11, 1%, Anti Sulfur	MCMR08X5111FTL
Resistor, 0805, 51K1, 1%, Anti Sulfur	MCMR08X5112FTL
Resistor, 5K1, 0805, 5%, Anti Sulfur	MCMR08X512 JTL
Resistor, 51K, 0805, 5%, Anti Sulfur	MCMR08X513 JTL
Resistor, 0805, 51R1, 1%, Anti Sulfur	MCMR08X51R1FTL
Resistor, 0805, 5K36, 1%, Anti Sulfur	MCMR08X5361FTL
Resistor, 0805, 5K6, 1%, Anti Sulfur	MCMR08X5601FTL
Resistor, 0805, 560K, 1%, Anti Sulfur	MCMR08X5603FTL
Resistor, 560R, 0805, 5%, Anti Sulfur	MCMR08X561 JTL
Resistor, 5K6, 0805, 5%, Anti Sulfur	MCMR08X562 JTL

Automotive and Anti-Sulfuration Chip Resistor 0805



Description	Part Number
Resistor, 0805, 56K2, 1%, Anti Sulfur	MCMR08X5622FTL
Resistor, 56K, 0805, 5%, Anti Sulfur	MCMR08X563 JTL
Resistor, 0805, 5K76, 1%, Anti Sulfur	MCMR08X5761FTL
Resistor, 0805, 5K9, 1%, Anti Sulfur	MCMR08X5901FTL
Resistor, 0805, 604R, 1%, Anti Sulfur	MCMR08X6040FTL
Resistor, 0805, 60K4, 1%, Anti Sulfur	MCMR08X6042FTL
Resistor, 0805, 60R4, 1%, Anti Sulfur	MCMR08X60R4FTL
Resistor, 62R, 0805, 5%, Anti Sulfur	MCMR08X620 JTL
Resistor, 0805, 62R, 1%, Anti Sulfur	MCMR08X62R0FTL
Resistor, 0805, 64K9, 1%, Anti Sulfur	MCMR08X6492FTL
Resistor, 0805, 665R, 1%, Anti Sulfur	MCMR08X6650FTL
Resistor, 0805, 6K8, 1%, Anti Sulfur	MCMR08X6801FTL
Resistor, 0805, 68K, 1%, Anti Sulfur	MCMR08X6802FTL
Resistor, 0805, 680K, 1%, Anti Sulfur	MCMR08X6803FTL
Resistor, 0805, 6K81, 1%, Anti Sulfur	MCMR08X6811FTL
Resistor, 0805, 68K1, 1%, Anti Sulfur	MCMR08X6812FTL
Resistor, 0805, 681K, 1%, Anti Sulfur	MCMR08X6813FTL
Resistor, 6K8, 0805, 5%, Anti Sulfur	MCMR08X682 JTL
Resistor, 68K, 0805, 5%, Anti Sulfur	MCMR08X683 JTL
Resistor, 680K, 0805, 5%, Anti Sulfur	MCMR08X684 JTL
Resistor, 0805, 68R, 1%, Anti Sulfur	MCMR08X68R0FTL
Resistor, 0805, 69R8, 1%, Anti Sulfur	MCMR08X69R8FTL
Resistor, 6R2, 0805, 5%, Anti Sulfur	MCMR08X6R2 JTL
Resistor, 0805, 71R5, 1%, Anti Sulfur	MCMR08X71R5FTL
Resistor, 0805, 73R2, 1%, Anti Sulfur	MCMR08X73R2FTL
Resistor, 75R, 0805, 5%, Anti Sulfur	MCMR08X750 JTL
Resistor, 0805, 750R, 1%, Anti Sulfur	MCMR08X7500FTL
Resistor, 0805, 75K, 1%, Anti Sulfur	MCMR08X7502FTL
Resistor, 750R, 0805, 5%, Anti Sulfur	MCMR08X751 JTL
Resistor, 0805, 787R, 1%, Anti Sulfur	MCMR08X7870FTL
Resistor, 0805, 7K87, 1%, Anti Sulfur	MCMR08X7871FTL
Resistor, 0805, 78K7, 1%, Anti Sulfur	MCMR08X7872FTL
Resistor, 7R5, 0805, 5%, Anti Sulfur	MCMR08X7R5 JTL
Resistor, 0805, 80K6, 1%, Anti Sulfur	MCMR08X8062FTL
Resistor, 82R, 0805, 5%, Anti Sulfur	MCMR08X820 JTL
Resistor, 0805, 8K2, 1%, Anti Sulfur	MCMR08X8201FTL

Automotive and Anti-Sulfuration Chip Resistor 0805



Description	Part Number
Resistor, 0805, 82K, 1%, Anti Sulfur	MCMR08X8202FTL
Resistor, 820R, 0805, 5%, Anti Sulfur	MCMR08X821 JTL
Resistor, 82K, 0805, 5%, Anti Sulfur	MCMR08X823 JTL
Resistor, 0805, 8K25, 1%, Anti Sulfur	MCMR08X8251FTL
Resistor, 0805, 866R, 1%, Anti Sulfur	MCMR08X8660FTL
Resistor, 0805, 86K6, 1%, Anti Sulfur	MCMR08X8662FTL
Resistor, 0805, 909K, 1%, Anti Sulfur	MCMR08X9093FTL
Resistor, 0805, 9K1, 1%, Anti Sulfur	MCMR08X9101FTL
Resistor, 910R, 0805, 5%, Anti Sulfur	MCMR08X911 JTL
Resistor, 9K1, 0805, 5%, Anti Sulfur	MCMR08X912 JTL
Resistor, 0805, 93R1, 1%, Anti Sulfur	MCMR08X93R1FTL
Resistor, 0805, 9K53, 1%, Anti Sulfur	MCMR08X9531FTL
Resistor, 0805, 95K3, 1%, Anti Sulfur	MCMR08X9532FTL
Resistor, 0805, 9K76, 1%, Anti Sulfur	MCMR08X9761FTL
Resistor, 0805, 976K, 1%, Anti Sulfur	MCMR08X9763FTL

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