ROHM SEMICONDUCTOR

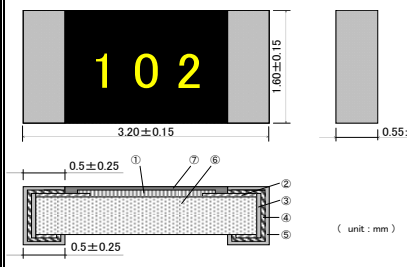
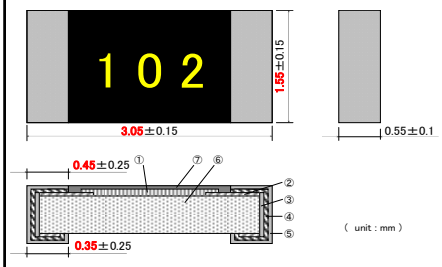
PRODUCTS: Thick Film Chip Resistors

TYPE: MCR18

< 3216(1206)size Comparative Specification >

Difference

Rev. M18R-01

	Rohm Product	OEM Product
Product	MCR18 EZP series	**MCR18 ERT series**
Country of Origin	Philippines	**China**
Dimension Construction		
① Resistive Layer	Resistive element	Resistive element
② Top Inner Electrode	Silver thick film electrode	Silver thick film electrode
③ Side Electrode	Silver thick film electrode	**Nickel-Chrome electrode**
④ Terminal Inner Electrode	Nickel plating	Nickel plating
⑤ Terminal Electrode	Tin plating	Tin plating
⑥ Substrate	Alumina	Alumina
⑦ Protect Layer	Over coating (Resin)	Over coating (Resin)

Marking

Marking Method	J class (±5.0%) : 3 digits marking F class (±1.0%) : 4 digits marking First two or three digits are significant figure , and final digit is multiplier. The R is used as a decimal point.	J class (±5.0%) : 3 digits marking F class (±1.0%) : 4 digits marking First two or three digits are significant figure , and final digit is multiplier. The R is used as a decimal point.
Marking Color	Yellowish white marking or other appropriate marking	Yellowish white marking or other appropriate marking

Package

Material	paper	paper
Pitch	4mm	4mm
Quantity	5,000 pcs	5,000 pcs

Rating

Rated Power	0.25 W at 70 ℃	0.25 W at 70 ℃
Limiting Element Voltage	200 V	200 V
Operating Temperature Range	−55℃ / +155℃	−55℃ / +155℃
Resistance Tolerance		
F級 (±1.0%)	10Ω ≦ R.V. < 1 MΩ : ±100 (E24 , E96) 1 MΩ ≦ R.V. ≦ 2.2 MΩ : ±100 (E24 , E96)	10Ω ≦ R.V. < 1 MΩ : ±100 (E24 , E96) 1 MΩ ≦ R.V. ≦ 2.2 MΩ : **±200** (E24 , E96)
J class (±5.0%)	1Ω ≦ R.V. < 10Ω : ±400 (E24) 10Ω ≦ R.V. ≦ 10 MΩ : ±200 (E24)	1Ω ≦ R.V. < 10Ω : ±400 (E24) 10Ω ≦ R.V. ≦ 10 MΩ : ±200 (E24)
Jumper Type		
Resistance	max 50 mΩ	max 50 mΩ
Rated Current	2 A	2 A
Operating Temperature Range	−55℃ / +155℃	−55℃ / +155℃

Characteristics , Reliability

Item	Test Conditions	Resistor Type	Jumper Type	Resistor Type	Jumper Type
Variation of Resistance with Temperature	+25℃ / +125℃	reffer to Resistance Tolerance		reffer to Resistance Tolerance	
Overload	Rated voltage (Current) x 2.5,2s Limiting Element Voltagex2 : 400V	±(2.0 % + 0.1Ω)	max. 50 mΩ	±(2.0 % + 0.1Ω)	max. 50 mΩ
Solderability	Soldering condition : 235±5℃ Duration of immersion : 2.0±0.5s	A new uniform coating of minimum of 95% of the surface being immersedand no soldering damage.		A new uniform coating of minimum of 95% of the surface being immersedand no soldering damage.	
Resistance to Soldering Heat	Soldering condition : 260±5℃ Duration of immersion : 10±1s	±(1.0 % + 0.05Ω)	max. 50 mΩ	±(1.0 % + 0.05Ω)	max. 50 mΩ
		No remarkable abnormality on the appearance.		No remarkable abnormality on the appearance.	
Rapid Change of Temperature	−55℃ / +125℃ 5 cycle	±(1.0 % + 0.05Ω)	max. 50 mΩ	±(1.0 % + 0.05Ω)	max. 50 mΩ
Damp Heat, Steady State	40℃、93%RH 1,000～1,048h	±(3.0 % + 0.1Ω)	max. 100 mΩ	±(3.0 % + 0.1Ω)	max. 100 mΩ
Endurance at 70℃	Rated voltage(current) 70℃ 1.5h−on/0.5h−off 1,000～1,048h	±(3.0 % + 0.1Ω)	max. 100 mΩ	±(3.0 % + 0.1Ω)	max. 100 mΩ
Endurance	155℃ 1,000～1,048h	±(3.0 % + 0.1Ω)	max. 100 mΩ	±(3.0 % + 0.1Ω)	max. 100 mΩ
Resistance to Solvent	23±5℃、 Immersion 5±0.5min Solvent: 2−propanol	±(1.0 % + 0.05Ω)	max. 50 mΩ	±(1.0 % + 0.05Ω)	max. 50 mΩ
Bond Strength of The End Face Plating	distance among support points:90mm amount of bend : 3mm	±(1.0 % + 0.05Ω)	max. 50 mΩ	±(1.0 % + 0.05Ω)	max. 50 mΩ
		Without mechanical damage such as breaks.		Without mechanical damage such as breaks.	

Design	Check	Approval	Date	SPECIFICATION No.
T.adachi	Tora Tsubada		11 / Nov /2011	ID − 1928
			Rev No. M18R−01E	ROHM Co.,Ltd.

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for rohm ***manufacturer:***

Other Similar products are found below :

BP5034D24 BP5013 BP5011 BP5718A12 R6035ENZC8 RN142ZST2R RB520S-40TE61 RB886YT2R RB851YT2R MCR100JZHF30R1 MCR100JZHJ150 MCR50JZHFLR820 MCR50JZHJ330 ML610Q793-SDK MNR34J5ABJ223 BD750L2FP-EVK-301 BD9009HFP-EVK-001 BD9285F-GE2 KTR10EZPF2203 SML-810TBT86 RB168L-60TE25 MCR100JZHF1301 MCR100JZHJ4R3 MCR100JZHJ513 MCR100JZHJ683 MCR10EZHFSR062 BD9B300MUV-EVK-001 MNR12ERAPJ100 RF1501TF3S MNR34J5ABJ221 BD9060HFP-EVK-001 BD9611MUV-EVK-001 BD9C601EFJ-EVK-001 BD9D321EFJ-EVK-101 SML-311DTT86 BA7603F-E2 BD95820N-LB BD9A100MUV-EVK-001 BD9C401EFJ-EVK-001 BD9C501EFJ-EVK-001 BU90005GWZ-E2-EVK-101 846-1001-KIT LA-401XD SLA560WBD2PT2 BH1790GLC-EVK-001 BD9B301MUV-EVK-101 BA7071F-E2 SK-AD01-D62Q1367TB BM2P129TF-EVK-001 RB-D62Q1577TB100