

## Professional Leaded Resistors



### DESCRIPTION

A homogeneous film of metal alloy is deposited on a high grade ceramic body. After a helical groove has been cut in the resistive layer, tinned connecting wires of electrolytic copper are welded to the end-caps. The resistors are coated with lacquer which provides electrical, mechanical, and climatic protection. Four or five colour code rings designate the resistance value and tolerance according to **IEC 60 062**.

### FEATURES

- Professional resistors in small outlines
- Low noise.

### APPLICATIONS

- All general purpose applications.

The resistors are completely Lead (Pb)-free, the pure tin plating provides compatibility with Lead (Pb)-free and lead-containing soldering processes.

Please note:

The resistors have to be ordered and will be delivered as MBA 0204-50. The equivalence with 5063JD series (spacemiser) is ensured.

TECHNICAL SPECIFICATIONS			
DESCRIPTION	VALUE		
	5063JD		
CECC size	A		
Resistance range	1 Ω to 10 MΩ		
Resistance tolerance	± 1 %		
Temperature coefficient	± 50 ppm/K		
Operation mode	long term	standard	
Climatic category (LCT/UCT/days)	55/125/56	55/155/56	
Rated dissipation, $P_{70}$	0.25 W	0.4 W	
Operating voltage, $U_{max}$ AC/DC	200 V		
Film temperature	125 °C	155 °C	
Max. resistance change at $P_{70}$ for resistance range,			
	1 000 h	≤ 0.25 %	≤ 0.5 %
	8 000 h	≤ 0.5 %	≤ 1.0 %
	225 000 h	≤ 1.5 %	–
Specified lifetime	225 000 h	8 000 h	
Permissible voltage against ambient:			
	1 minute	300 V	
continuous	75 V		
Stability ( $\Delta R/R$ max.) after:			
	load (1 000 hours)	± 0.25 % + 0.05 Ω	± 0.50 % + 0.05 Ω
	climatic test	± 1.0 % + 0.05 Ω	
	resistance to soldering heat	± 0.25 % + 0.05 Ω	
	short time overload (400 V max.)	± 0.25 % + 0.05 Ω	

For detailed specifications, please see datasheet MBA 0204 Professional Series.

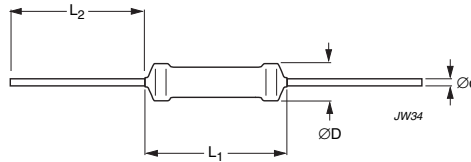
# 5063JD Series (spacemiser)

Vishay

Professional Leaded Resistors



## DIMENSIONS



DIMENSIONS - leaded resistor type and relevant physical dimensions				
TYPE	ØD <sub>max</sub> (mm)	L <sub>1</sub> max (mm)	L <sub>2</sub> max (mm)	Ød (mm)
5063JD	1.6	3.6	29	0.5

## MECHANICAL DATA

Mass per 100 units = 13 g

## MARKING

The nominal resistance and tolerance are marked on the resistor using four or five colored bands in accordance with IEC publication 60062 "Color codes for fixed resistors".

## MOUNTING

The resistors are suitable for processing on automatic insertion equipment in addition to cutting and bending machines. The minimum bending is 5 mm (.200 inch).

## OUTLINES

The length of the body (L<sub>1</sub>) is measured by inserting the leads into holes of two identical gauge plates and moving these plates parallel to each other until the resistor body is clamped without deformation ("IEC publication 60294").

HISTORICAL PART NUMBER INFORMATION					
TYPE	TC (X 10 <sup>-6</sup> /K)	TOL. (%)	RESISTANCE RANGE	PART NUMBER	SPQ (units)
5063JD	± 50	-	jumper <sup>(1)</sup>	5063JD0R000J12AF5	5 000; tape & reel
		-	jumper <sup>(1)</sup>	5063JD0R000J18AF5	5 000; ammpack
		± 1	1 Ω to 10MΩ	5063JDxxxxxF12AF5	5 000; tape & reel
		± 1	1 Ω to 10MΩ	5063JDxxxxxF18AF5	5 000; ammpack

### Note

1. A 0 Ω jumper is available with maximum resistance R<sub>max</sub> ≤ 10 mΩ at 3 A.

## EXAMPLE HISTORICAL PART NUMBER

The historical part number of a 5063JD resistor, value 5 600 Ω ± 1 %, taped on a bandolier of 5 000 units in tape on reel is: 5063JD5K600F12AF5.

PART NUMBER AND PRODUCT DESCRIPTION																	
Part Numbering: MBA02040C562RFCT00																	
M	B	A	0	2	0	4	0	C	5	6	2	0	F	C	T	0	0
Model	SPECIAL CHARACTER	TC	VALUE			TOLERANCE	PACKAGING	Special									
MBA 0204	0 = Neutral	C = ± 50 ppm/K Z = Jumper	3 digit value 1 digit multiplier MULTIPLIER 7 = *10 <sup>-3</sup> 8 = *10 <sup>-2</sup> 9 = *10 <sup>-1</sup> 0 = *10 <sup>0</sup> 1 = *10 <sup>1</sup> 2 = *10 <sup>2</sup> 3 = *10 <sup>3</sup> 4 = *10 <sup>4</sup> 5 = *10 <sup>5</sup> 6 = *10 <sup>6</sup>			F = ± 1 %	CT = CT (5 000 pcs ammpack) RP = RP (5 000 pcs tape and reel)	00 = Standard									
Product Description: MBA 0204-50 1% 562R CT																	
MBA0204	50	1.0 %	562R		CT												
MODEL	TC	TOLERANCE	RESISTANCE VALUE		PACKAGING												
MBA 0204	± 50 ppm/K	± 1 %	49K9 = 49.9 KΩ 50R1 = 50.1 Ω		CT RP												