

Type 3315 Series



This component is an ideal choice for applications when miniaturisation is essential. With a very small outline package (5.0 x 4.5 x 2.3mm), it is designed specifically for pick and place equipment. This is probably the ultimate in a sealed miniature potentiometer eminently suited to surface mounting and hybrid systems. Special radial O ring seals and state of the art materials permit circuit adjustments and re-adjustments even after wave soldering. The 3315 is designed to withstand temperatures up to 300°C hence providing unparalleled safety margins, regardless of the SMD process.

Key Features

- Supplied on STD EIA Embossed Tape
- Small Versatile Size
- Sealed with an O-Ring
- Suitable for Dip and Reflow Soldering
- Ideal for Automatic Placement
- Side Adjust Version Available
- 0.25W at 70°C
- Available in J Hook and Gull Wing Styles

Characteristics - Electrical

Resistance Range:	10R to 2M 1, 2, 5 in each decade
Resistance Tolerance:	±20%
Power Rating:	0.25W at 70°C, derating to 0 at 125°C
Resolution:	Essentially infinite
Input Voltage:	200V dc or Power Rating, whichever is smaller
Wiper Current:	100mA
Electrical Angle:	210°
End Resistance:	1% or 2 ohms, whichever is greater
Contact Resistance Variation:	1% or 3 ohms, whichever is greater
Insulation Resistance:	500 V DC 1000M minimum
Dielectric Strength:	500V AC 1 minute

Characteristics - Mechanical

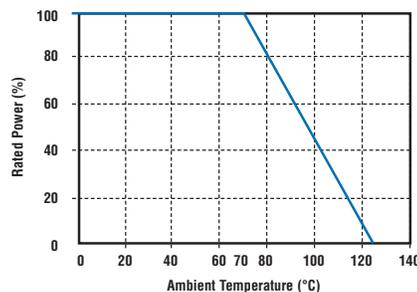
Mechanical Angle:	240°
Operating Torque:	10mNm
Stop Strength:	30mNm
Weight:	3315/3316 - 0.12 grams ~ 3317 - 0.22 grams
Terminals:	Solder Plated Copper Alloy

Characteristics - Environmental

ITEM	TEST CONDITIONS	ΔR/R
Operating Temperature:	-55°C - +125°C	-
Temperature Coefficient:	100ppm/°C maximum 100R to 2M 250ppm/°C maximum 10R to 50R	-
Thermal Shock:	-65°C - 125°C, 5 cycles (0.5 hrs)	≤ ± 2%
Humidity:	-10°C to +65°C 80 - 90% RH, 10 cycles, 240 hours.	≤ ± 2%
Shock:	100G, 6 directions, 3 times	≤ ± 1%
Vibration:	20G, 10 - 2000 Hz, 12 times.	≤ ± 1%
Soldering Heat:	260°C 10 secs / 215°C - 35 secs.	≤ ± 1%
Load Life:	70°C, rated power, 1000 hours.	≤ ± 3%
Low Temperature Operation:	-55°C, 2 hours.	≤ ± 2%
High temperature Operation:	125°C, 250 hours.	≤ ± 3%
Rotational Life:	100 cycles	≤ ± (2 ohm+ 3%)
Seal Test:	85°C 1 minute	No Leaks

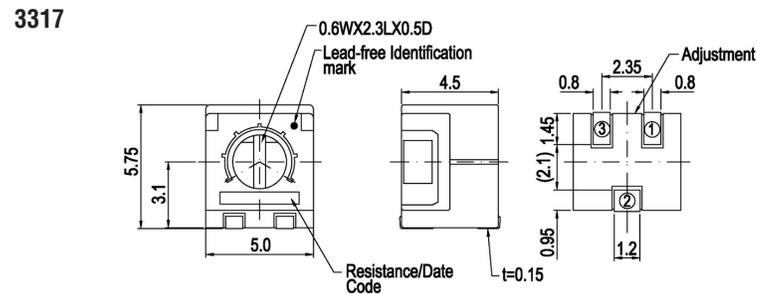
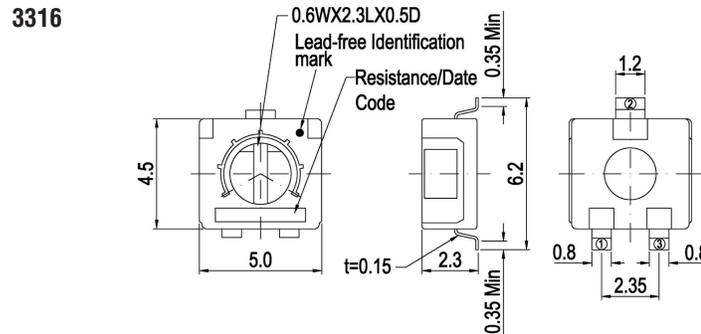
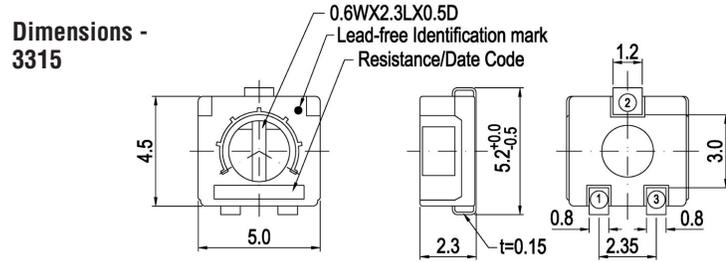
ΔR/R: Change in total resistance

Derating Curve



When the ambient temperature exceeds 70°C, reduce the rated power and current in accordance with the derating curve shown

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Cleaning Conditions

After soldering use cleaning solvents such as water or alcohol but not solvents containing CFC's. It is recommended the component be less than 30°C prior to cleaning.

Depending on flux to be applied, markings may, though a rare case, disappear or fade out at soldering. Please make sure before its use.

Storage

To prevent damage to the electrode, be sure to observe the following conditions for storage.

Store in 25°C maximum ambient temperature, and 75% maximum ambient RH.

For maximum possible shelf life do not disturb polythene sleeve until you are ready to use potentiometers.

Recommend use within one year of delivery.

Store where there are no harmful gasses containing sulphur or chlorine. Do not agree expose to direct sunlight or dust.

How to Order

3315	X	104	M
Common Part	Orientation	Resistance Value	Tolerance
3315 - J Lead Termination 3316 - Gull Wing Termination 3317 - Side Adjust	X - Terminals 1 and 3 away from the sprocket holes	The first two digits are significant figures of resistance value and the third denotes the number of zeros following. e.g. 100R: 101 1K: 102 10K: 103 100K: 104	M - 20 %