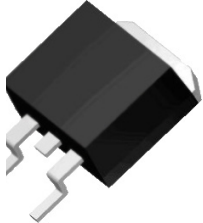


Power Resistor



RoHS
Compliant



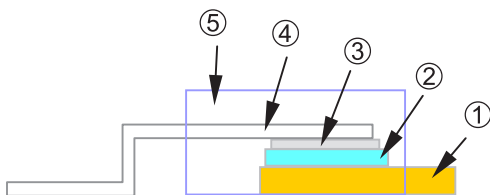
Features

- 35 watts at 25°C case temperature
- TO-263 style power package for surface mounted resistor
- Molded case for protection
- Resistor is electrically isolated from metal tab

Applications

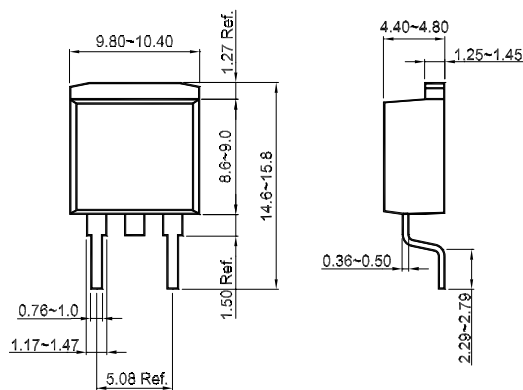
- Switching Power Supplies
- Snubbers Circuits
- Automated Machine Controller
- RF Power Amplifiers
- Low Energy Pulse Loading
- UPS
- Voltage Regulation
- Bleeder Resistors

Construction



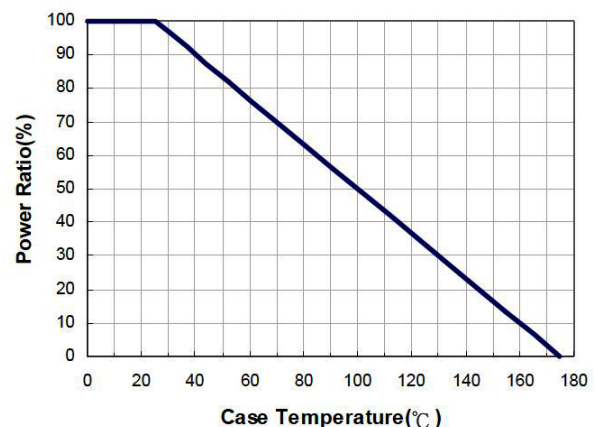
1	Flange
2	Alumina Substrate
3	Resistor Layer
4	Lead
5	Molding

Dimensions



Dimensions : Millimetres

Derating Curve



Power Resistor



Electrical Characteristics Specifications

Type \ Item	Resistance Range				TCR (PPM/°C)
	±0.5%	±1%	±5%	±10%	
MCSTR35			0.5Ω – 0.91Ω		No Specified
			1Ω – 2.7Ω		±100 ±300
			3Ω -10Ω		±100 ±200
			>10Ω –100kΩ		±50 ±100 ±200

Operating Voltage : 500V Max.
 Dielectric Strength : 2000V AC
 Insulation Resistance : 10GΩ min.
 Working Temperature Range : -55°C to +175°C
 Resistance Value : < 1Ω is available

Environmental Characteristics

Item	Requirement	Test Method
Temperature Coefficient of Resistance (T.C.R.)	As Spec.	JIS-C-5201-1 4.8 IEC 60115-1 4.8 Referenced to 25°C, ΔR taken at +105°C
Short Time Overload	ΔR±0.3%	JIS-C-5201-1 4.13 IEC 60115-1 4.13 2 times rated power with applied voltage not to exceed 1.5 times maximum continuous operating voltage for 5 seconds
Load Life	ΔR±1.0%	JIS-C-5201-1 4.25 IEC 60115-1 4.25 2,000 hours at rated power
High Temperature Exposure	ΔR±0.25%	MIL-STD-202 method 108 at +175°C for 1000 hrs. Unpowered.
Temperature Cycling	ΔR±0.3%	JESD22 Method JA-104 -55°C~+175°C, 1000 cycles
Damp Heat with Load	ΔR±0.5%	JIS-C-5201-1 4.24 IEC 60115-1 4.24 40±2°C, 90~95% R.H., RCWV for 1000 hrs with 1.5 hrs "ON" and 0.5 hr "OFF"
Vibration, High Frequency	ΔR±0.2%	MIL-STD-202 Method 204 5 g's for 20 min., 12 cycles each of 3 orientations, 10-2000 Hz
Resistance to Soldering Heat	ΔR±0.5%	JIS-C-5201-1 4.18 IEC 60115-1 4.18 260±5°C for 10 seconds

www.element14.com
www.farnell.com
www.newark.com



Power Resistor



Item	Requirement	Test Method
Solderability	90% min. coverage	J-STD-002 245±5°C for 3 seconds
Terminal Strength	No broken	AEC-Q200-006 Force of 1.8kg for 60 seconds.

Lead Material: Tinned Copper

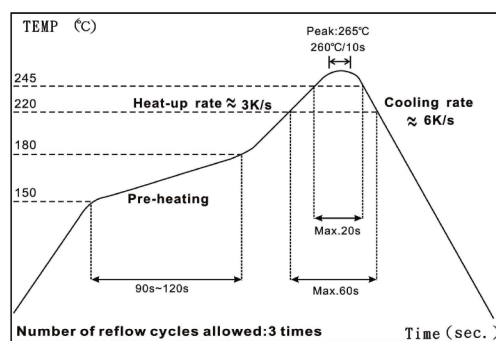
Maximum Torque: 0.9 N-m

When in Free Air at 25°C, the MCSTR35 is Rated for 2.5W

The Case Temperature is to be used for the Definition of the Applied Power Limit

RCWV(Rated Continuous Working Voltage)= $\sqrt{P \times R}$ or Max. Operating Voltage whichever is lower.

Soldering Condition



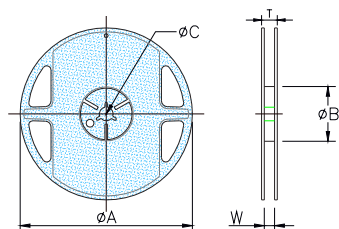
IR Reflow Soldering

(1) Time of IR reflow soldering at maximum temperature point 260°C: 10s

(2) Time of soldering iron at maximum temperature point 410°C: 5s

Packaging

Reel Specifications & Packaging Quantity



Type	Packaging Quantity	Tape Width	Reel Diameter	ΦA (mm)	ΦB (mm)	ΦC (mm)	W (mm)	T (mm)
MCSTR35	500 pcs	24mm	13 inch	330 ±1	100 ±0.5	13.5 ±0.3	25.4 ±0.5	30 ±0.5

www.element14.com

www.farnell.com

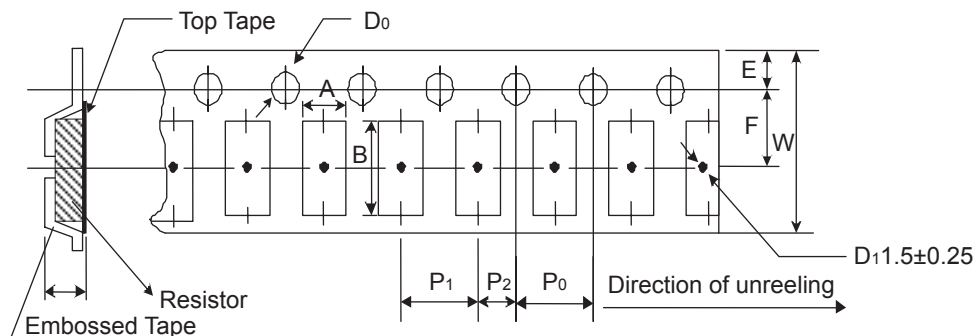
www.newark.com



Power Resistor



Embossed Plastic Tape Specifications



Type	A (mm)	B (mm)	W (mm)	E (mm)	F (mm)	P ₀ (mm)	P ₁ (mm)	P ₂ (mm)	D ₀ (mm)	T (mm)
MCSTR	10.8 ±0.1	16.13 ±0.1	24 ±0.3	1.75 ±0.1	11.5 ±0.1	4 ±0.1	16 ±0.1	2 ±0.1	1.55 ±0.05	5.25 ±0.2

Part Number Explanation

MCSTR

Series Type

35

Power
35: 35 Watts

J

Resistance Tolerance
D: ±0.5%
F: ±1%
J: ±5%
K: ±10%

B

Packaging Code
B: Bulk
D: Tube
T: Taping

G

TCR (PPM/°C)
D: ±50
E: ±100
F: ±200
G: ±300
- : No Specified

2R70

Resistance
R015: 0.015Ω
R050: 0.05Ω

Important Notice : This data sheet and its contents (the "Information") belong to the members of the Premier Farnell group of companies (the "Group") or are licensed to it. No licence is granted for the use of it other than for information purposes in connection with the products to which it relates. No licence of any intellectual property rights is granted. The Information is subject to change without notice and replaces all data sheets previously supplied. The Information supplied is believed to be accurate but the Group assumes no responsibility for its accuracy or completeness, any error in or omission from it or for any use made of it. Users of this data sheet should check for themselves the Information and the suitability of the products for their purpose and not make any assumptions based on information included or omitted. Liability for loss or damage resulting from any reliance on the Information or use of it (including liability resulting from negligence or where the Group was aware of the possibility of such loss or damage arising) is excluded. This will not operate to limit or restrict the Group's liability for death or personal injury resulting from its negligence. Multicomp is the registered trademark of the Group. © Premier Farnell Limited 2016.