

Data Sheet

Customer:**Product:** TO-263 SMD Power Resistors – STR35 Series**Size:** 35W**Issued Date:** 3-Oct-22**Edition:** REV.A5

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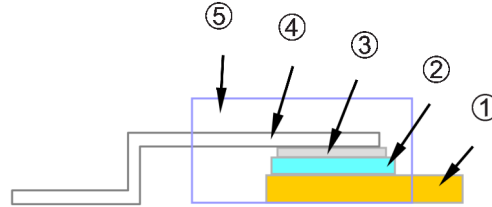
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TO-263 SMD Power Resistors – STR35 Series



Construction



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

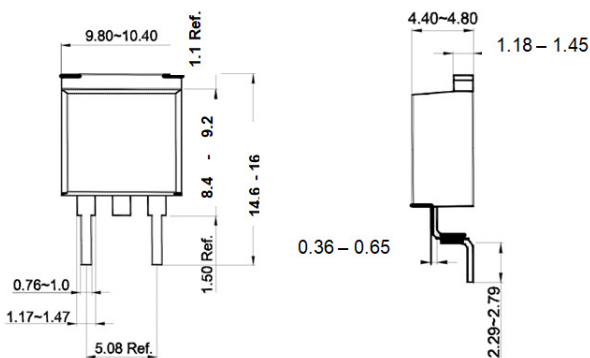
Features

- 35 watts at 25°C case temperature heat sink mounted
- Molded case for protection and easy to mount
- Resistor is electrically isolated from metal tab

Applications

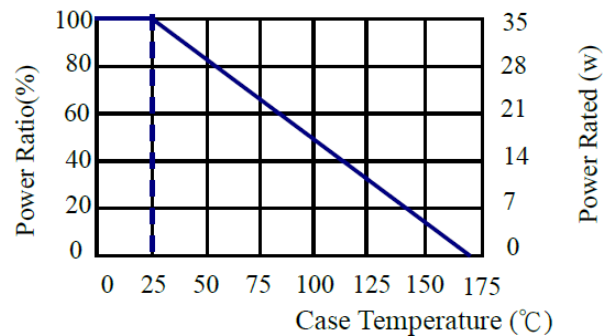
- Switching Power Supplies
- Snubbers Circuits
- Automated Machine Controller
- RF Power Amplifiers
- Low Energy Pulse Loading
- UPS
- Voltage Regulation

Dimensions



Unit:mm

Derating Curve



Part Numbering

STR	35	J	D	D	1001
Product Type	Power	Resistance Tolerance	Packaging Code	TCR (PPM/°C)	Resistance
	35: 35 Watts	D: ±0.5% F: ±1% J: ±5% K: ±10%	T:Taping Reel D:Tube	D: ±50 E: ±100 F: ±200 G: ±300 - : No Specified	R100: 0.1Ω 0100: 10Ω 4700: 470Ω 1001: 1KΩ 1002: 10KΩ

Electrical Characteristics Specifications

Item Type	Resistance Range				TCR (PPM/°C)
	±0.5%	±1%	±5%	±10%	
STR35	-	-	0.05Ω - 0.1Ω		No Specified
	-	≥ 0.1Ω - 1Ω			No Specified
	-	≥ 1Ω - 5Ω			±100 ±200 ±300
	≥ 10Ω - 100KΩ			±50 ±100 ±200	
	≥ 5Ω - 10Ω			±100 ±200 ±300	

- Operating Voltage: 350V Max.
- Dielectric Strength: 1800VAC
- Insulation Resistance: 10GΩ min.
- Operating Temperature Range: -65°C to +150°C

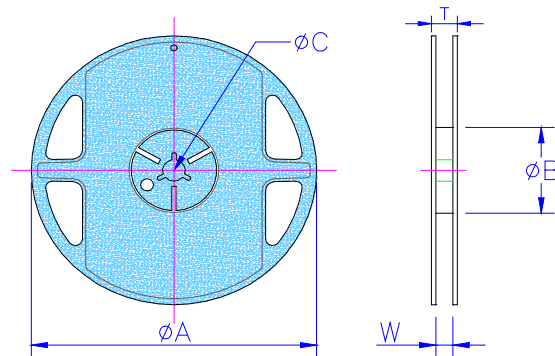
Environmental Characteristics

Item	Requirement	Test Method
Temperature Coefficient of Resistance (T.C.R.)	As Spec.	Referenced to 25°C, ΔR taken at +105°C
Short Time Overload	ΔR±0.3%	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%	2,000 hours at rated power
Damp Heat with Load	ΔR±0.5%	40±2°C, 90~95% R.H., RCWV for 1000 hrs with 1.5 hrs "ON" and 0.5 hr "OFF"
Solderability	90% min. Coverage	245±5°C for 3 seconds
Temperature Cycling	ΔR±0.3%	-65°C~+150°C, 1000 cycles
Terminal Strength	ΔR±0.2%	(Pull Test)2.4N
Vibration, High Frequency	ΔR±0.2%	20g peak

- Lead Material: Tinned Copper
- Maximum Torque: 0.9 Nm
- Without a Heat Sink, When in Free Air at 25°C, the STR35 is Rated for 2.5W
- The Case Temperature is to be used for the Definition of the Applied Power Limit
- The Case Temperature Measurement must be made with a Thermocouple Contacting the Center of the Component mounted on the Designed Heat Sink.
- Thermal Grease should be Applied Properly.
- Storage Temperature: 25±5°C ; Humidity: <75%RH

■ Packaging

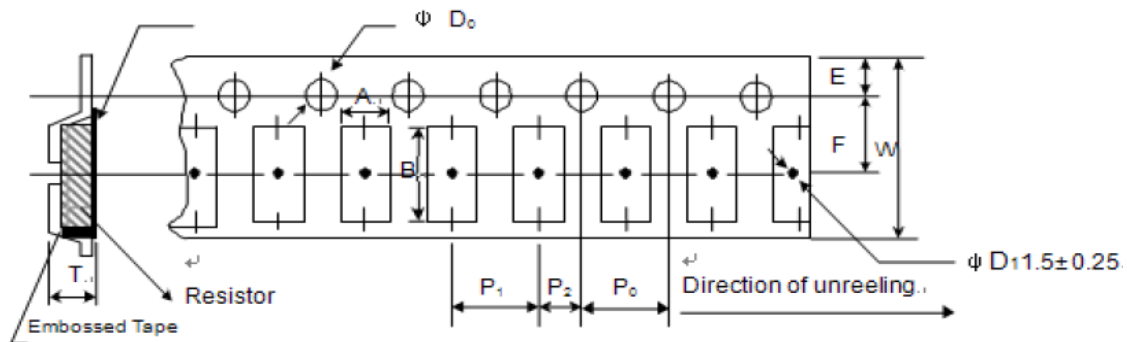
Reel Specifications & Packaging Quantity



Unit:mm

Type	Packaging Quantity	Reel Diameter	ΦA	ΦB	ΦC	W	T
STR35	500 pcs	13 inch	330±1.0	100±0.5	13.5±0.3	25.4±0.5	30.0±0.5

Embossed Plastic Tape Specifications



Unit:mm

Type	A	B	W	E	F	P ₀	P ₁	P ₂	ΦD ₀	T
STR35	10.80±0.10	16.13±0.10	24.0±0.30	1.75±0.1	11.5±0.1	4.0±0.1	16.0±0.1	2.0±0.1	1.55±0.05	5.25±0.20

Tube Packaging Quantity

Type	Packaging Tube
STR35	50 pcs