Data Sheet

Customer:	
Product:	**TO-263 SMD Power Resistors – STR35 Series**
Size:	**35W**
Issued Date:	**14-May-25**
Edition:	**REV.A7**

RoHS Compliant

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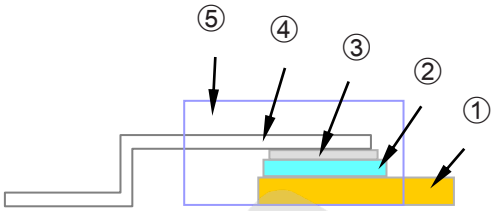
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TO-263 SMD Power Resistors – STR35 Series



■Construction



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

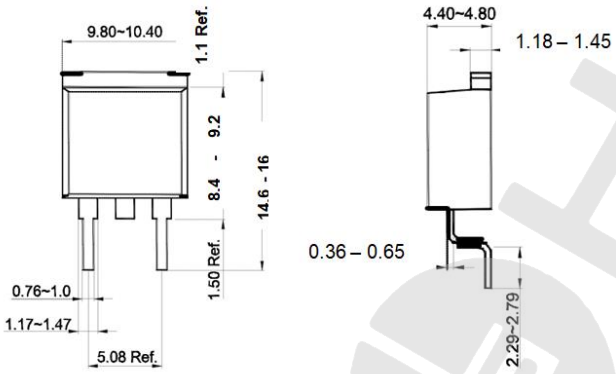
■Features

- 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

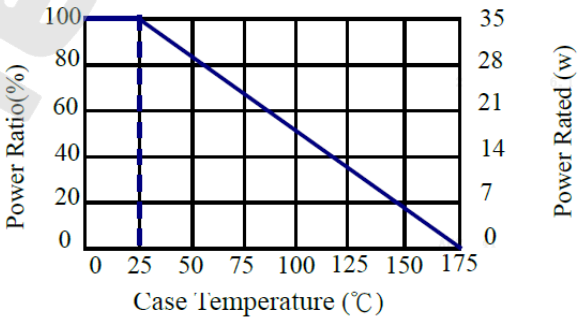
- Switching Power Supplies
- Snubbers Circuits
- Automated Machine Controller
- RF Power Amplifiers
- Low Energy Pulse Loading
- UPS
- Voltage Regulatio

■Dimensions



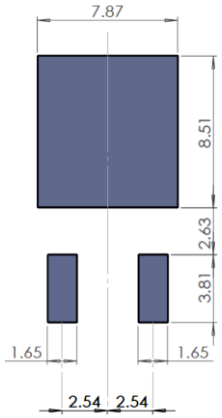
Unit:mm

■Derating Curve



Derating Curve Slope：0.23W/°K、Thermal resistance：4.28°K/W

■Recommended Pad Layout



■Part Numbering

STR	35	J	D	D	1001
Product Type	Power	Resistance Tolerance	Packaging Code	TCR (PPM/℃)	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 (±300~±700)	R100: 0.1Ω 0100: 10Ω 4700: 470Ω 1001: 1KΩ 1002: 10KΩ

■Electrical Characteristics Specifications

Item / Type	Resistance Range				TCR (PPM/℃)
	±0.5%	±1%	±5%	±10%	
STR35	-	-	0.05Ω - 0.1Ω		No Specified (±300~±700)
	-	≧ 0.1Ω - 1Ω			±300
	-	≧1Ω - 5Ω			±100 ±200 ±300
	≧ 10Ω - 100KΩ				±50 ±100 ±200
	≧ 5Ω - 10Ω				±100 ±200 ±300

■Operating Voltage: 350V
■Dielectric Strength: 1800VAC
■Insulation Resistance: 10GΩ min.
■Operating Temperature Range: -55°C to +175°C
■Storage Temperature: 25°C , Humidity: 25%～80% ,
■Shelf life: 1 years Max

■Environmental Characteristics

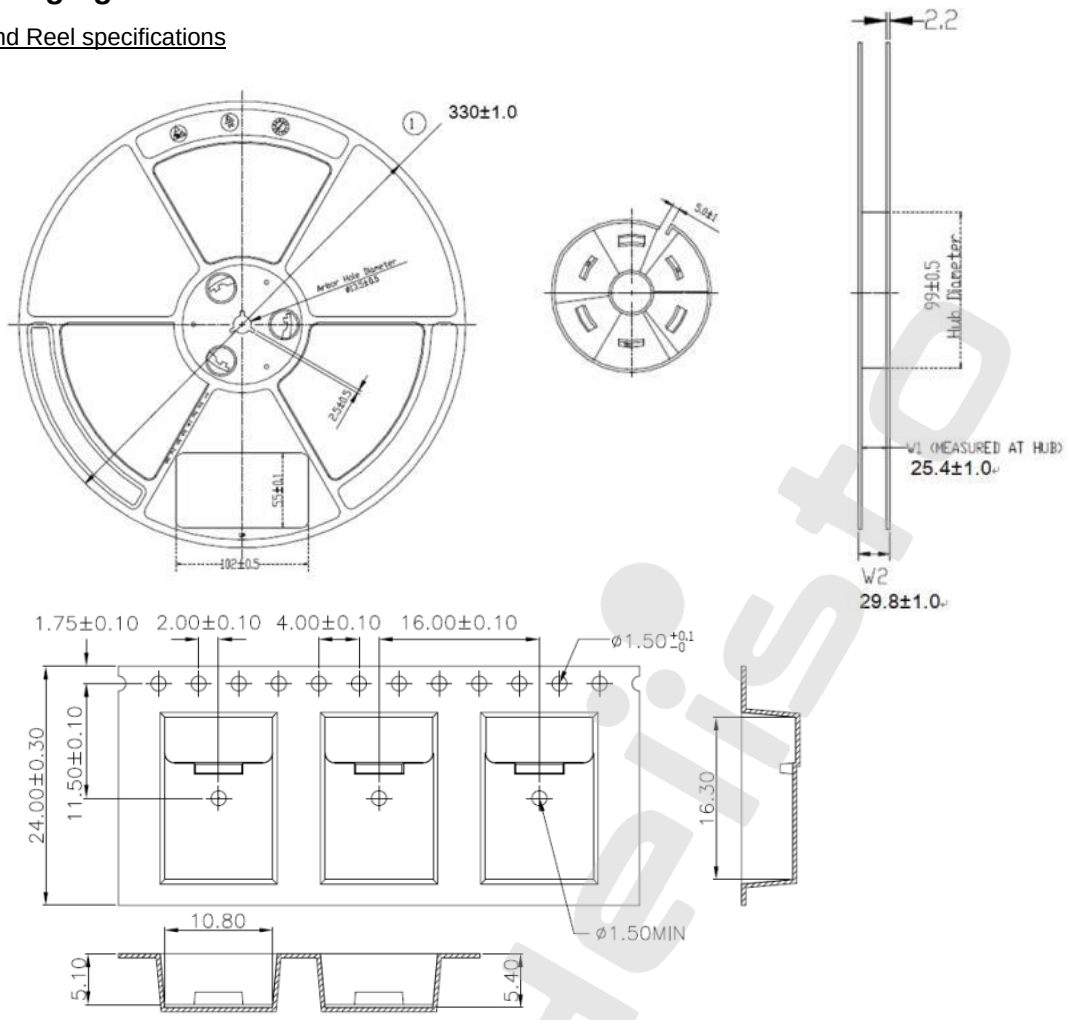
Item	Requirement	Test Method
Temperature Coefficient of Resistance (T.C.R.)	As Spec.	Referenced to 25°C, ΔR taken at +105°C
Short Time Overload	ΔR±0.3%	2 times rated power with applied voltage not to exceed 1.5 times maximum continuous operating voltage for 5 seconds
Load Life	ΔR±1.0%	2,000 hours at 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	270±5°C for 3 seconds
Temperature Cycling	ΔR±0.3%	-65℃~+150°C, 100 cycles
Terminal Strength	ΔR±0.2%	(Pull Test)2.4N
Vibration, High Frequency	ΔR±0.2%	20g peak
Moisture Sensitivity Level	1	-

■Lead Material: Tinned Copper
■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.

■Packaging

Tape and Reel specifications

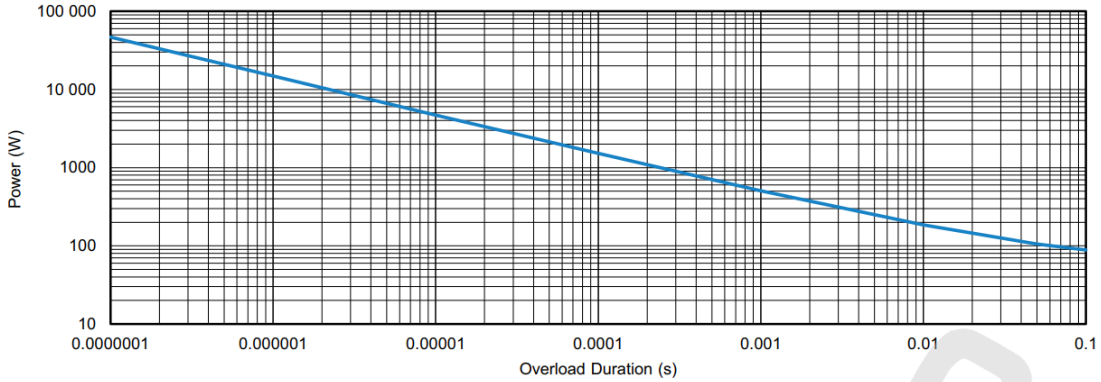


Type	Packaging Quantity
	Reel
STR35	500 pcs

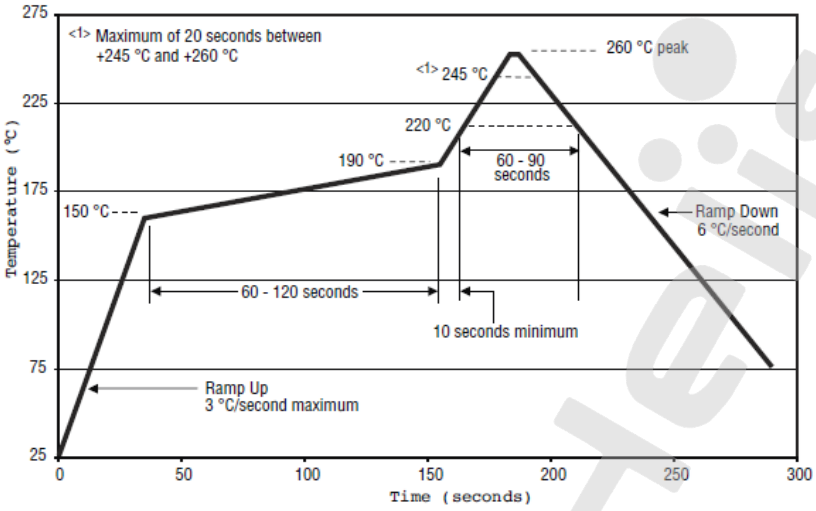
Tube Packaging Quantity

Type	Packaging Quantity
	Tube
STR35	50 pcs

■Power Curve



■Soldering Profile



REVISION HISTORY

REVISION	DATE	CHANGE NOTIFICATION	DESCRIPTION
Version A6	Feb 27 ,2025		-Add Recommended Pad Layout -Update Environmental Characteristics -Change the operating temperature -Change the Packaging specifications -Add Storage conditions
Version A7	May 14 ,2025		-Modify the TCR specification for 0.05Ω – 0.1Ω from No Specified to No Specified (±300~±700) -Modify the TCR specification for ≥0.1Ω – 1Ω from No Specified to ±300 -Add Power Curve and Soldering Profile.