



CHENMKO ENTERPRISE CO.,LTD

Lead free devices

SCHOTTKY BARRIER RECTIFIER

VOLTAGE RANGE 20 - 60 Volts CURRENT 1.0 Ampere

SR020PT

THRU

SR060PT

FEATURES

- * Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- * Low switching noise
- * Low forward voltage drop
- * High current capability
- * High switching capability
- * High reliability
- * High surge capability
- * High temperature soldering guaranteed : 260°C/10 seconds , 0.375" (9.5mm) lead length, 5lbs. (2.3kg) tension

MECHANICAL DATA

Case: JEDEC R-1 molded plastic body

Terminals: Plated axial leads, solderable per MIL-STD-750, Method 2026

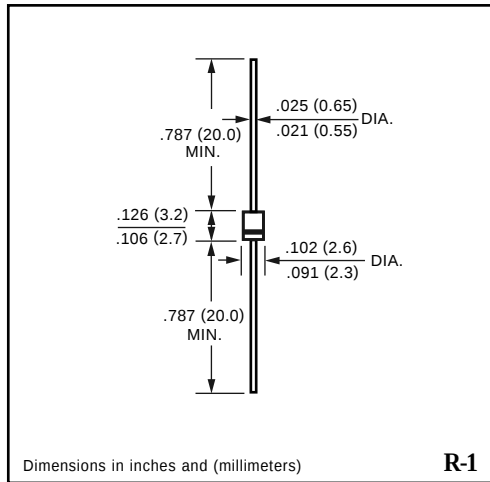
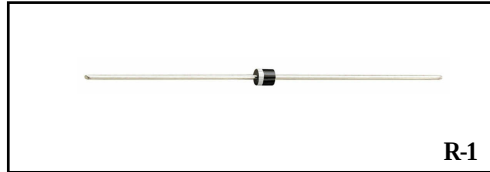
Polarity: Color band denotes cathode end

Mounting Position: Any

Weight: 0.19 gram

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.
Single phase, half wave, 60 Hz, resistive or inductive load.
For capacitive load, derate current by 20%.



MAXIMUM RATINGS (At TA = 25°C unless otherwise noted)

RATINGS	SYMBOL	SR020PT	SR030PT	SR040PT	SR050PT	SR060PT	UNITS
Maximum Recurrent Peak Reverse Voltage	VRRM	20	30	40	50	60	Volts
Maximum RMS Voltage	VRMS	14	21	28	35	42	Volts
Maximum DC Blocking Voltage	VDC	20	30	40	50	60	Volts
Maximum Average Forward Rectified Current 0.375" (9.5mm) lead length (SEE FIG.1)	Io	1.0					Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	IFSM	30					Amps
Typical Junction Capacitance (Note 1)	CJ	110					pF
Typical Thermal Resistance (Note 2)	R θJA	80					°C / W
Operating Temperature Range	TJ	-65 to +125			-65 to +150		°C
Storage Temperature Range	TSTG	-65 to +150					°C

ELECTRICAL CHARACTERISTICS (At TA = 25°C unless otherwise noted)

CHARACTERISTICS		SYMBOL	SR020PT	SR030PT	SR040PT	SR050PT	SR060PT	UNITS
Maximum Instantaneous Forward Voltage at 1.0 A DC		V _F	0.55			0.70		Volts
Maximum Average Reverse Current	@ T _A = 25°C	I _R	1.0					mAmps
at Rated DC Blocking Voltage	@ T _A = 100°C		10					mAmps

NOTES : 1. Measured at 1.0 MHz and applied reverse voltage of 4.0 volts
2. Thermal Resistance (Junction to Ambient) : Vertical PC Board Mounting, 0.5" (12.7mm) Lead Length.

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RATING CHARACTERISTIC CURVES (SR020PT THRU SR060PT)

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

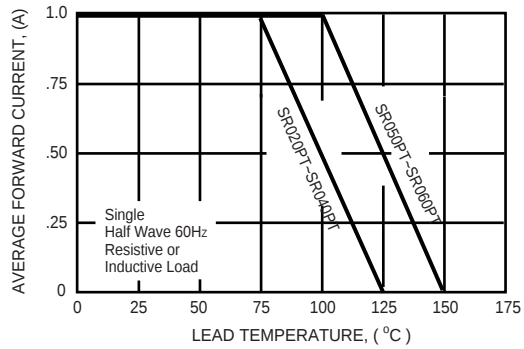


FIG. 2 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

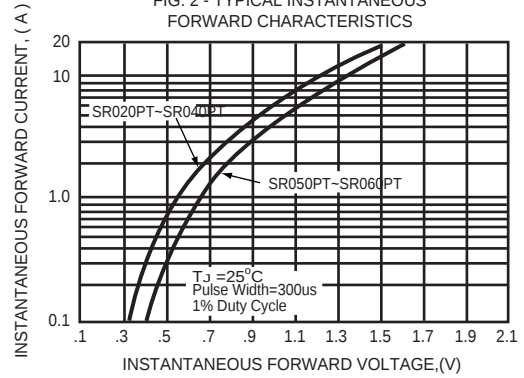


FIG. 3A - TYPICAL REVERSE CHARACTERISTICS

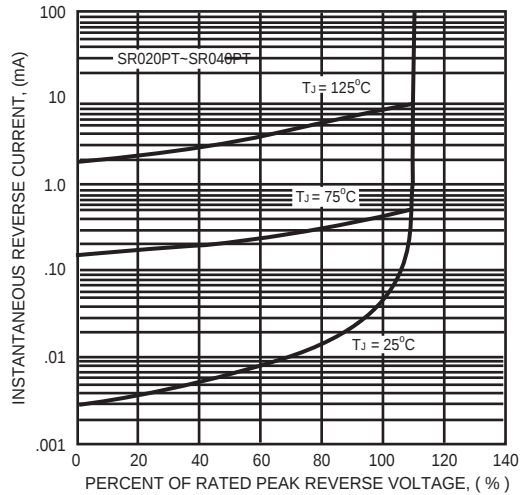


FIG. 3B - TYPICAL REVERSE CHARACTERISTICS

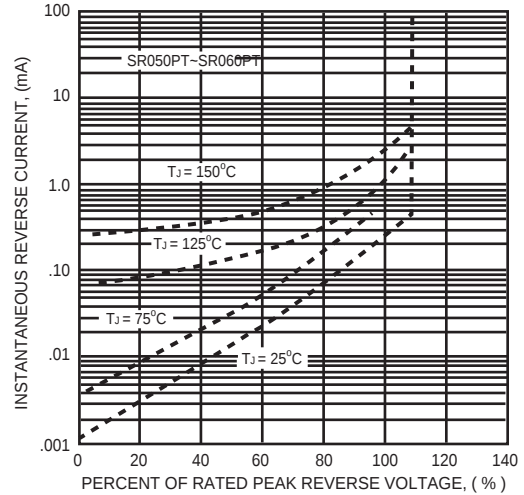


FIG. 4 - TYPICAL JUNCTION CAPACITANCE

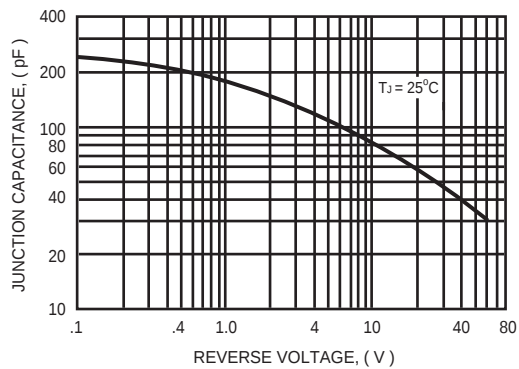


FIG. 5 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

