



CHENMKO ENTERPRISE CO.,LTD

**SR120PT
THRU
SR160PT**

Lead free devices

SCHOTTKY BARRIER RECTIFIER

VOLTAGE RANGE 20 - 60 Volts CURRENT 1.0 Ampere

FEATURES

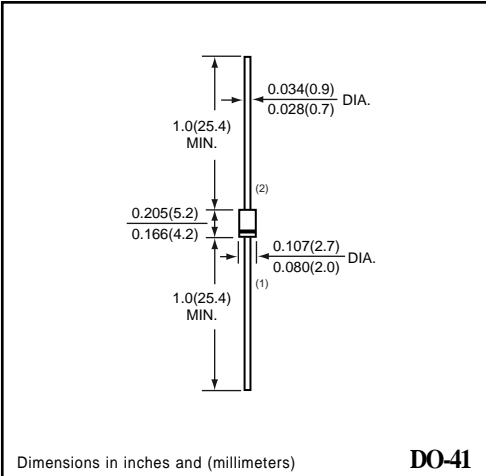
- * Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- * Low switching noise
- * Low forward voltage drop
- * High current capability
- * High switching capability
- * High reliability
- * High surge capability
- * High temperature soldering guaranteed : 260°C/10 seconds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

MECHANICAL DATA

Case: JEDEC DO-41 molded plastic body
Terminals: Plated axial leads, solderable per MIL-STD-750, Method 2026
Polarity: Color band denotes cathode end
Mounting Position: Any
Weight: 0.33 gram



DO-41



DO-41

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	SR120PT	SR130PT	SR140PT	SR150PT	SR160PT	UNITS
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	20	30	40	50	60	Volts
Maximum RMS Voltage	V _{RMS}	14	21	28	35	42	Volts
Maximum DC Blocking Voltage	V _{DC}	20	30	40	50	60	Volts
Maximum Average Forward Rectified Current 0.375" (9.5mm) lead length (SEE FIG.1)	I _O	1.0					Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	I _{FSM}	40					Amps
Typical Junction Capacitance (Note 1)	C _J	110					pF
Typical Thermal Resistance (Note 2)	R _{θJA}	50					°C / W
Operating Temperature Range	T _J	-65 to +125			-65 to +150		°C
Storage Temperature Range	T _{STG}	-65 to +150					°C

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

CHARACTERISTICS	SYMBOL	SR120PT	SR130PT	SR140PT	SR150PT	SR160PT	UNITS
Maximum Instantaneous Forward Voltage at 1.0 A DC	V _F	0.55			0.70		Volts
Maximum Average Reverse Current	I _R	1.0					mAmps
at Rated DC Blocking Voltage		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.

RATING CHARACTERISTIC CURVES (SR120PT THRU SR160PT)

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

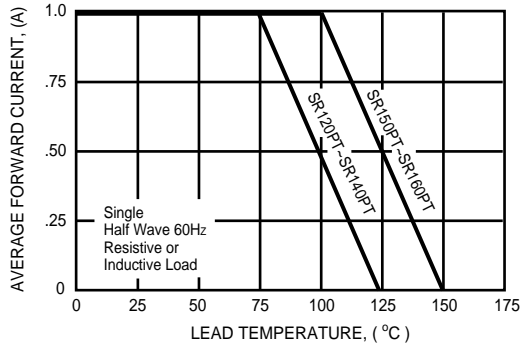


FIG. 2 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

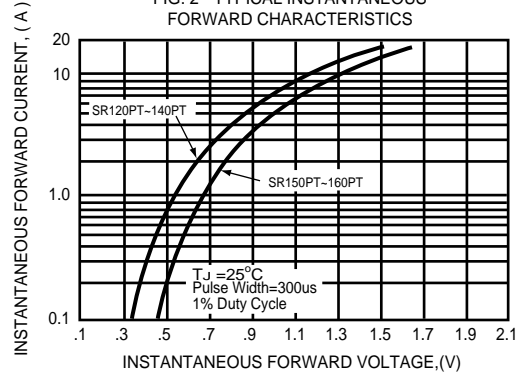


FIG. 3A - TYPICAL REVERSE CHARACTERISTICS

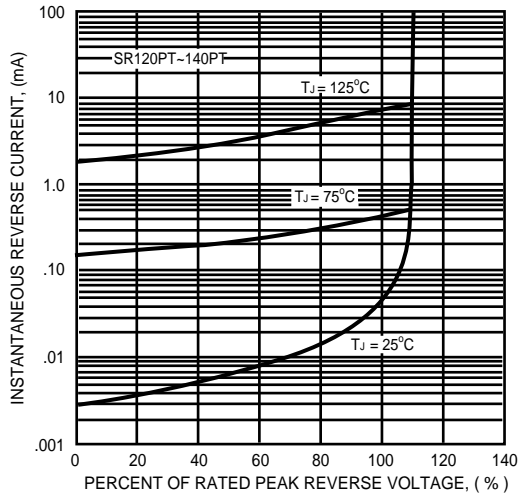


FIG. 3B - TYPICAL REVERSE CHARACTERISTICS

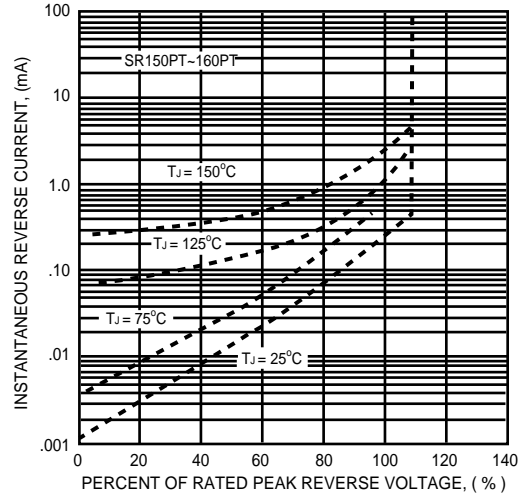


FIG. 4 - TYPICAL JUNCTION CAPACITANCE

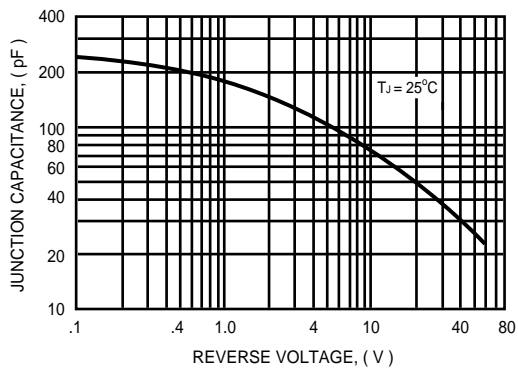


FIG. 5 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

