

CHENMKO ENTERPRISE CO.,LTD

SR370PT **THRU SR3100PT**

Lead free devices

SCHOTTKY BARRIER RECTIFIER

VOLTAGE RANGE 70 - 100 Volts CURRENT 3.0 Amperes

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-201AD molded plastic body

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

Method 2026

Polarity: Color band denotes cathode end

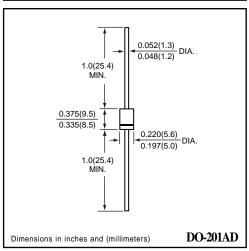
Mounting Position: Any Weight: 1.18 grams

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 RATINGES (At TA = 25°C unless otherwise noted)

RATINGS	SYMBOL	SR370PT	SR380PT	SR390PT	SR3100PT	UNITS
Maximum Recurrent Peak Reverse Voltage	VRRM	70	80	90	100	Volts
Maximum RMS Voltage	VRMS	49	56	63	70	Volts
Maximum DC Blocking Voltage	VDC	70	80	90	100	Volts
Maximum Average Forward Rectified Current 0.375" (9.5mm) lead length (SEE FIG.1)	lo	3.0				
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	IFSM	80				
Typical Junction Capacitance (Note 1)	C1	200				
Typical Thermal Resistance (Note 2)	R θ JA	30				
Operating Temperature Range	TJ	-65 to +150				
Storage Temperature Range	Тѕтс	-65 to +150				

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

ELECTRICAL CHARACTERISTICS (Nº 17 - 20 O dilicos cincimise noted)											
CHARACTERISTICS		SYMBOL	SR370PT	SR380PT	SR390PT	SR3100PT	UNITS				
Maximum Instantaneous Forward Voltage at 3.0 A DC		VF	0.75		0.80		Volts				
Maximum Average Reverse Current	@ TA = 25°C	lr.	3.0				mAmps				
at Rated DC Blocking Voltage	@ Ta = 100°C	IR IR	30								

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 (SR370PT THRU SR3100PT) FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE FIG. 2 - TYPICAL INSTANTANEOUS INSTANTANEOUS FORWARD CURRENT, (A) FORWARD CHARACTERISTICS 20 AVERAGE FORWARD CURRENT, (A) 10 3.0 2.0 1.0 Single Half Wave 60Hz 1.0 Resistive or Inductive Load 1% Duty Cycle 0 0.1 0 25 50 75 100 125 150 175 .9 1.1 1.3 1.5 1.7 LEAD TEMPERATURE, (°C) INSTANTANEOUS FORWARD VOLTAGE,(V) FIG. 3A - TYPICAL REVERSE CHARACTERISTICS FIG. 3B - TYPICAL REVERSE CHARACTERISTICS 100 100 SR390~SR3100 INSTANTANEOUS REVERSE CURRENT, (mA) INSTANTANEOUS REVERSE CURRENT, (mA) 10 10 1.0 .10 .01 .01 .001 .001 PERCENT OF RATED PEAK REVERSE VOLTAGE, (%) PERCENT OF RATED PEAK REVERSE VOLTAGE, (%) FIG. 4 - TYPICAL JUNCTION CAPACITANCE FIG. 5 - MAXIMUM NON-REPETIVE FORWARD SURGE CURRENT 1000 PEAK FORWARD SURGE CURRETN(A) 100 JUNCTION CAPACITANCE, (pF) 600 80 8.3ms Single Half Sine-Wave (JEDEC Method) 200 60 100 40 60 20 20 10 40 2 80 100 6 8 10 REVERSE VOLTAGE, (V) NUMBER OF CYCLES AT 60 Hz