



**CHENMKO ENTERPRISE CO.,LTD**

*Halogens free devices*

**SCHOTTKY BARRIER RECTIFIER**

VOLTAGE RANGE 100 Volts CURRENT 5.0 Amperes

**SR5100GP**

**FEATURES**

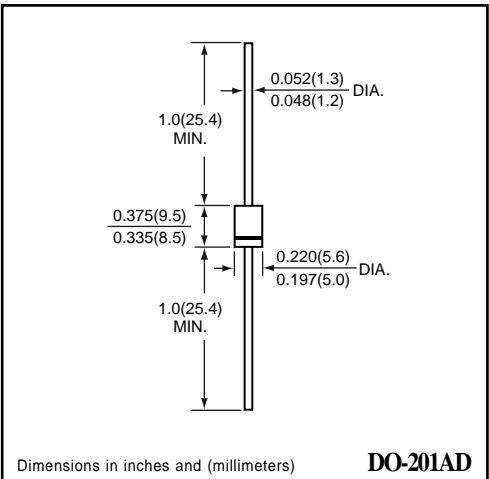
- \* Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- \* Low switching noise
- \* Low forward voltage drop
- \* High current capability
- \* High switching capability
- \* High reliability
- \* High surge capability
- \* High temperature soldering guaranteed : 260°C/10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

**MECHANICAL DATA**

**Case:** JEDEC DO-201AD molded plastic body  
**Polarity:** Color band denotes cathode end  
**Mounting Position:** Any



**DO-201AD**



**DO-201AD**

**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	SR5100GP	UNITS
Maximum Recurrent Peak Reverse Voltage	VRRM	100	Volts
Maximum RMS Voltage	V <sub>RMS</sub>	70	Volts
Maximum DC Blocking Voltage	V <sub>DC</sub>	100	Volts
Maximum Average Forward Rectified Current 0.375" (9.5mm) lead length (SEE FIG.1)	I <sub>O</sub>	5.0	Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	I <sub>FSM</sub>	150	Amps
Typical Junction Capacitance (Note 1)	C <sub>J</sub>	150	pF
Typical Thermal Resistance (Note 2)	R θJA	18	°C / W
Operating Temperature Range	T <sub>J</sub>	-65 to +150	°C
Storage Temperature Range	T <sub>STG</sub>	-65 to +150	°C

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

CHARACTERISTICS	SYMBOL	SR5100GP	UNITS
Maximum Instantaneous Forward Voltage at 5.0 A DC	V <sub>F</sub>	0.80	Volts
Maximum Average Reverse Current at Rated DC Blocking Voltage	@ TA = 25°C	3.0	mAmps
	@ TA = 100°C	30	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 ( SR5100GP )

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

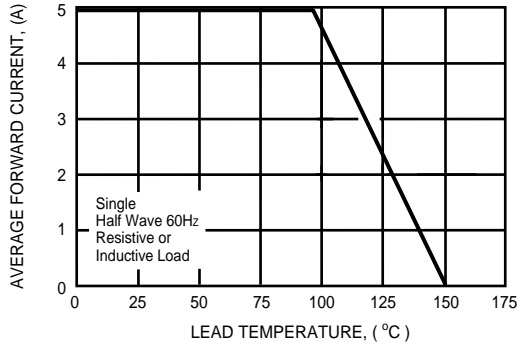


FIG. 2 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

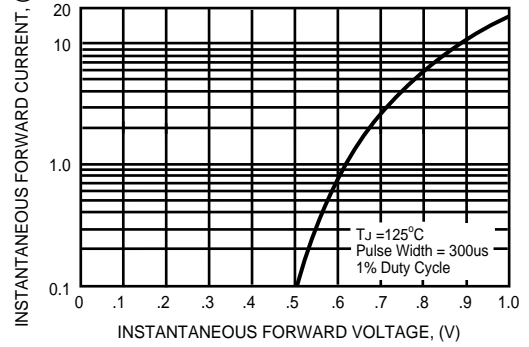


FIG. 3 - TYPICAL REVERSE CHARACTERISTICS

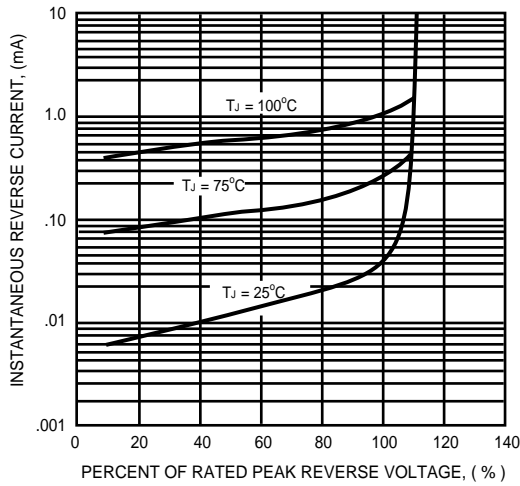


FIG. 4 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

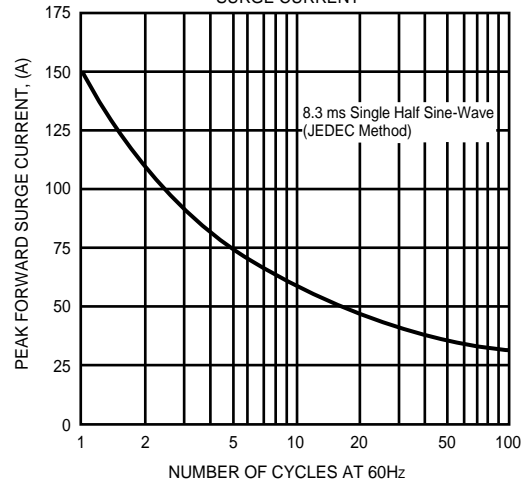


FIG. 5 - TYPICAL JUNCTION CAPACITANCE

