



CHENMKO ENTERPRISE CO.,LTD

Halogens free devices

SCHOTTKY BARRIER RECTIFIER

VOLTAGE RANGE 70 - 100 Volts CURRENT 5 Amperes

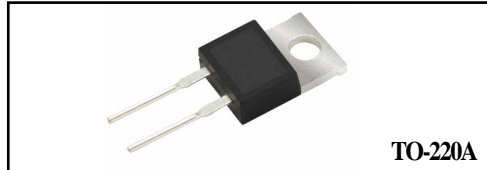
**S05A70GP
THRU
S05A100GP**

FEATURES

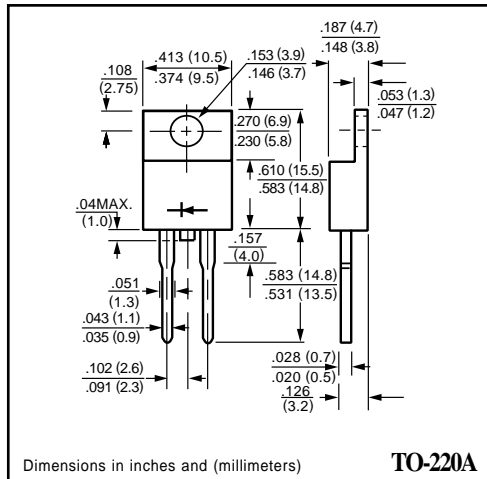
- * Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- * Metal Silicon junction, majority carrier conduction
- * Low power loss,high efficiency
- * High current capability, low forward voltage drop
- * Guardring for overvoltage protection
- * For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications
- * High temperature soldering in accordance with CECC 802 / Reflow guaranteed

MECHANICAL DATA

Case: JEDEC TO-220A molded plastic
Terminals: Lead solderable per MIL-STD-750, Method 2026
Polarity: As marked
Weight: 1.81 grams (Approximately)



TO-220A



TO-220A

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	S05A70GP	S05A80GP	S05A90GP	S05A100GP	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	Io	5.0				Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	IFSM	125				Amps
Typical thermal resistance per leg (NOTE 1)	R θJC	5.0				°C / W
Operating and Storage Temperature Range	TJ, TSTG	-60 to +150				°C

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

CHARACTERISTICS	SYMBOL	S05A70GP	S05A80GP	S05A90GP	S05A100GP	UNITS
Maximum Instantaneous Forward Voltage at 5.0 A DC	VF	0.75		0.85		Volts
Maximum instantaneous reverse current at rated DC blocking voltage per leg (NOTE 2)	Tc = 25°C	5.0				mAmps
	Tc = 125°C	50				mAmps

- NOTES : 1. Thermal resistance from junction to case per leg
 2. Pulse test : 300 us pulse width, 1% duty cycle
 3. Suffix " P " = Case Positive, Suffix " R " = Case Negative.

RATING CHARACTERISTIC CURVES (S05A70GP THRU S05A100GP)

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

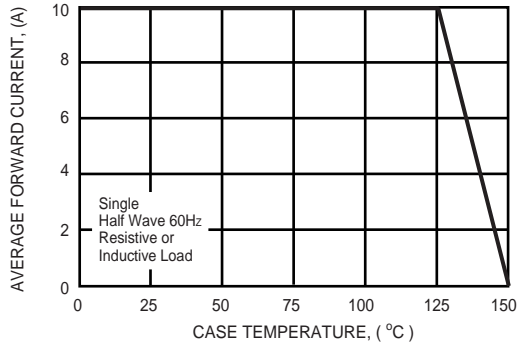


FIG. 2 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

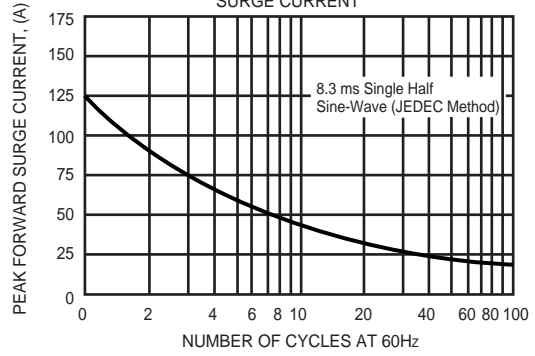


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

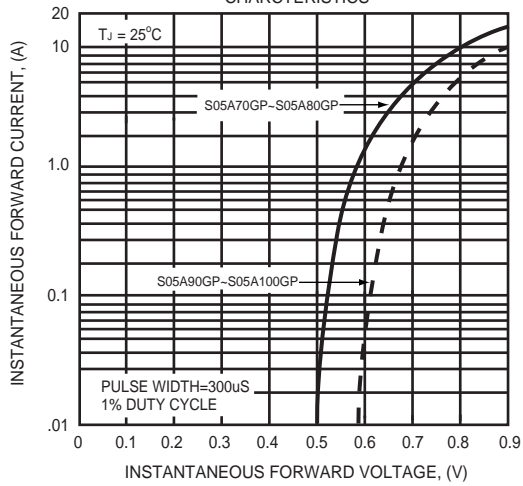


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

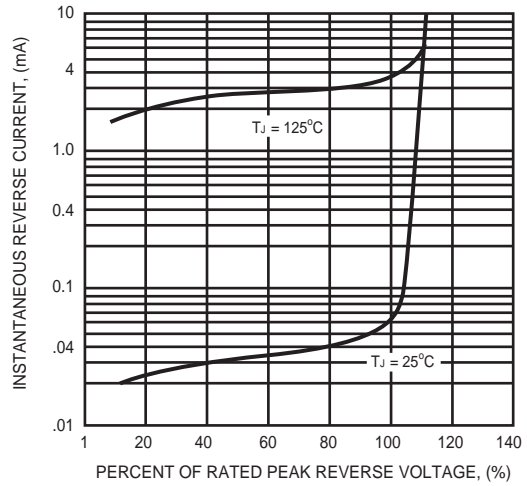


FIG. 5 - TYPICAL JUNCTION CAPACITANCE

