



CHENMKO ENTERPRISE CO.,LTD

Halogens free devices

SCHOTTKY BARRIER RECTIFIER

VOLTAGE RANGE 70 - 100 Volts CURRENT 20 Amperes

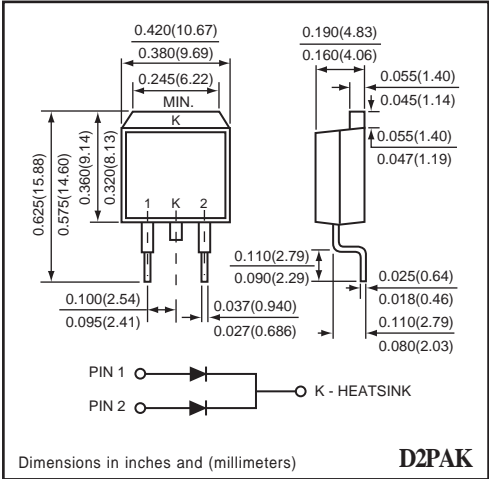
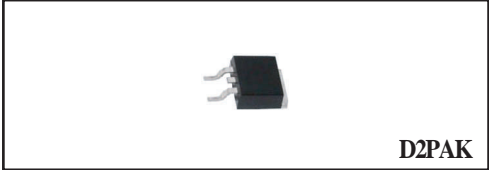
**S20S70GP
THRU
S20S100GP**

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

MECHANICAL DATA

Case: JEDEC D2PAK molded plastic
Terminals: Lead solderable per MIL-STD-750, Method 2026
Polarity: As marked
Weight: 0.08 ounces, 2.24 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 RATINGS (At TA = 25°C unless otherwise noted)

RATINGS	SYMBOL	S20S70GP	S20S80GP	S20S90GP	S20S100GP	UNITS
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	70	80	90	100	Volts
Maximum RMS Voltage	V _{RMS}	49	56	63	70	Volts
Maximum DC Blocking Voltage	V _{DC}	70	80	90	100	Volts
Maximum Average Forward Rectified Current	I _O	20.0				Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	I _{FSM}	200				Amps
Typical thermal resistance per leg (NOTE 1)	R _{θJC}	2.2				°C / W
Operating and Storage Temperature Range	T _J , T _{STG}	-60 to +150				°C

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

CHARACTERISTICS	SYMBOL	S20S70GP	S20S80GP	S20S90GP	S20S100GP	UNITS
Maximum Instantaneous Forward Voltage at 10.0 A DC	V _F	0.75		0.85		Volts
Maximum instantaneous reverse current at rated DC blocking voltage per leg (NOTE 2)	T _C = 25°C	5.0				mAmps
	T _C = 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 " C " = Common Cathod, Suffix " A " = Common Anode, Suffix " D " = Double.

RATING CHARACTERISTIC CURVES (S20S70GP THRU S20S100GP)

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

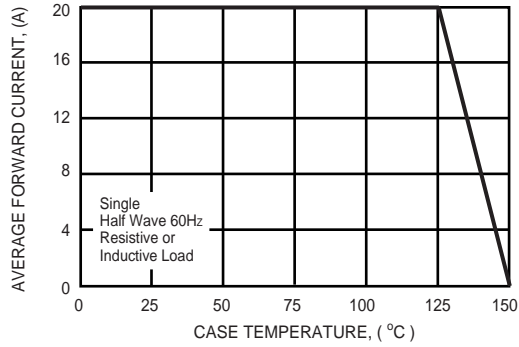


FIG. 2 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

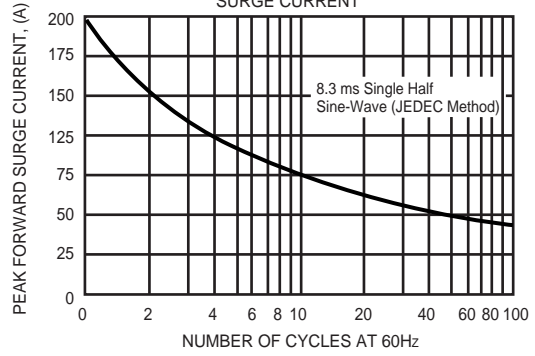


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

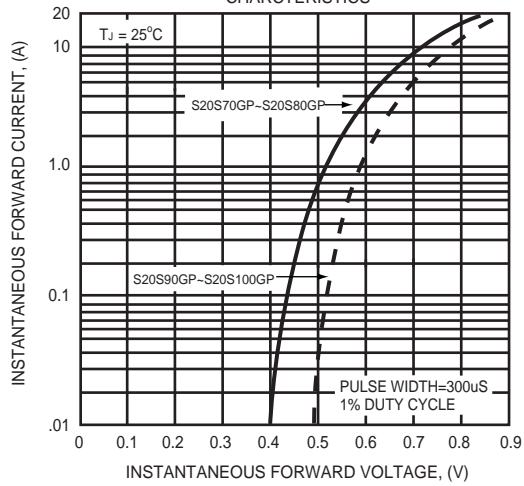


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

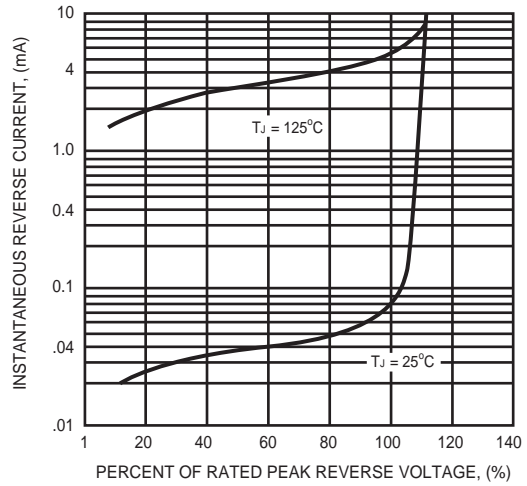


FIG. 5 - TYPICAL JUNCTION CAPACITANCE

