



CHENMKO ENTERPRISE CO.,LTD

SCHOTTKY BARRIER RECTIFIER

VOLTAGE RANGE 70 - 100 Volts CURRENT 20 Amperes

S20C70PT

THRU

S20C100PT

FEATURES

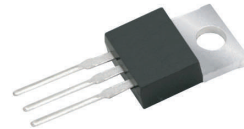
- * Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- * Metal Silicon junction, majority carrier conduction
- * Low power loss,high efficiency
- * High current capability, low forward voltage drop
- * Guardring for overvoltage protection
- * For use in low voltage, high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

MECHANICAL DATA

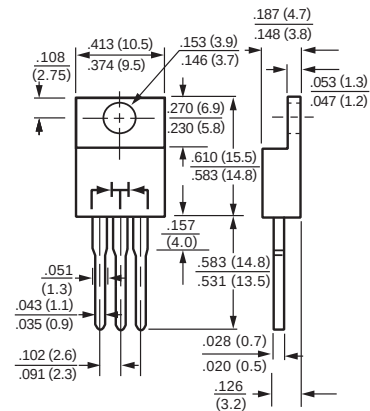
Case: JEDEC TO-220 molded plastic

Polarity: As marked

Weight: 2.24 grams (Approximately)



TO-220



Dimensions in inches and (millimeters)

TO-220

MAXIMUM RATINGS (At $T_A = 25^{\circ}\text{C}$ unless otherwise noted)

RATINGS	SYMBOL	S20C70PT	S20C80PT	S20C90PT	S20C100PT	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)	$R_{\theta JC}$	2.2				$^{\circ}\text{C} / \text{W}$
Operating and Storage Temperature Range	T_J, T_{STG}	-60 to +150				$^{\circ}\text{C}$

ELECTRICAL CHARACTERISTICS (At $T_A = 25^{\circ}\text{C}$ unless otherwise noted)

CHARACTERISTICS		SYMBOL	S20C70PT	S20C80PT	S20C90PT	S20C100PT	UNITS
Maximum Instantaneous Forward Voltage at 10.0 A DC		V _F	0.75		0.85		Volts
Maximum instantaneous reverse current at	T _C = 25°C	I _R	5.0				mAmps
rated DC blocking voltage per leg (NOTE 2)	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.

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RATING CHARACTERISTIC CURVES (S20C70PT THRU S20C100PT)

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

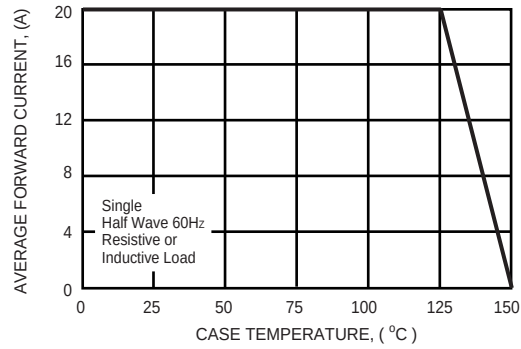


FIG. 2 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

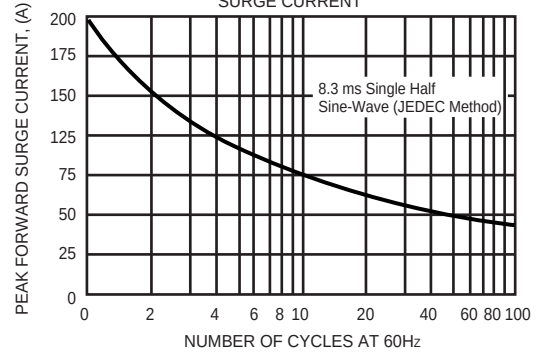


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

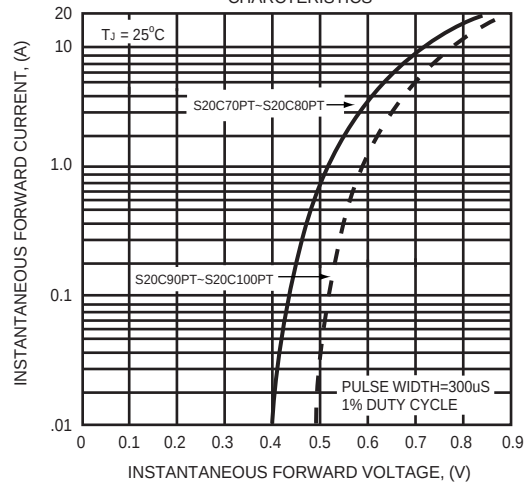


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

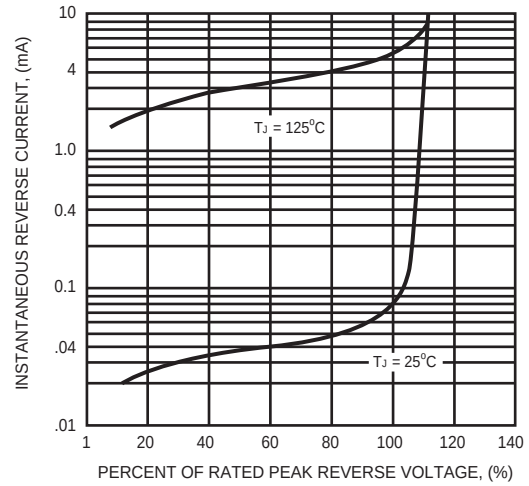


FIG. 5 - TYPICAL JUNCTION CAPACITANCE

