CHENMKO ENTERPRISE CO.,LTD

Lead free devices

SCHOTTKY BARRIER RECTIFIER

VOLTAGE RANGE 20 - 40 Volts CURRENT 6 Amperes

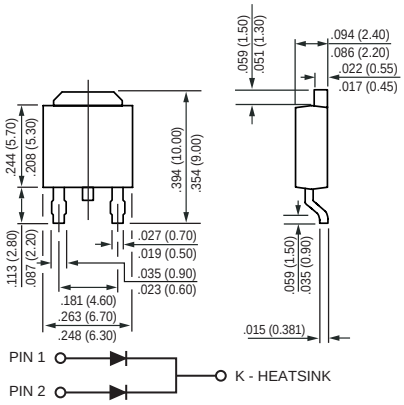
S06P20PT
THRU
S06P40PT

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



DPAK



Dimensions in inches and (millimeters)

DPAK

MECHANICAL DATA

Case: JEDEC DPAK molded plastic
Terminals: Lead solderable per MIL-STD-750, Method 2026
Polarity: As marked
Weight: 1.7 grams (Approximately)

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 T_A = 25°C unless otherwise noted)

RATINGS	SYMBOL	S06P20PT	S06P30PT	S06P40PT	UNITS
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	20	30	40	Volts
Maximum RMS Voltage	V_{RMS}	14	21	28	Volts
Maximum DC Blocking Voltage	V_{DC}	20	30	40	Volts
Maximum Average Forward Rectified Current	I_O	6.0			Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	150			Amps
Typical thermal resistance per leg (NOTE 1)	$R_{\theta JC}$	5.0			°C / W
Operating and Storage Temperature Range	T_J, T_{STG}	-40 to +125			°C

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

CHARACTERISTICS		SYMBOL	S06P20PT	S06P30PT	S06P40PT	UNITS
Maximum Instantaneous Forward Voltage at 3.0 A DC		V_F	0.55			Volts
Maximum instantaneous reverse current at rated DC blocking voltage per leg (NOTE 2)	T_C = 25°C	I_R	1.0			mAmps
	T_C = 100°C		50			mAmps

NOTES : 1. Thermal resistance from junction to case per leg
2. Pulse test : 300 us pulse width, 1% duty cycle

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RATING CHARACTERISTIC CURVES (S06P20PT THRU S06P40PT)

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

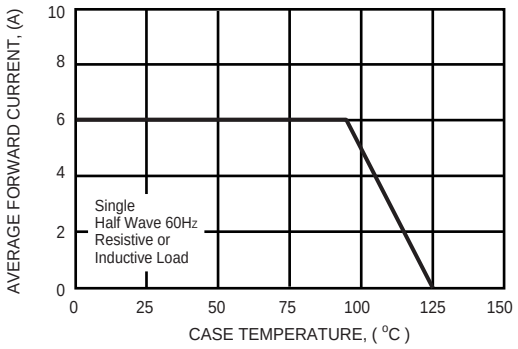


FIG. 2 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

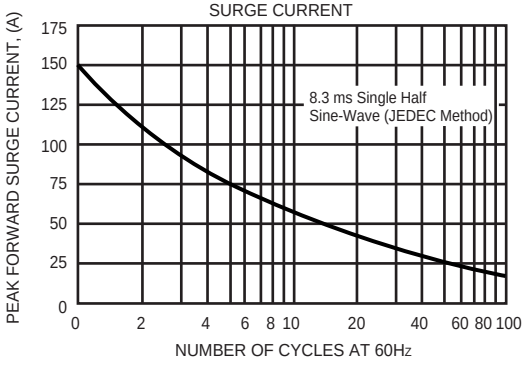


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARCTERISTICS

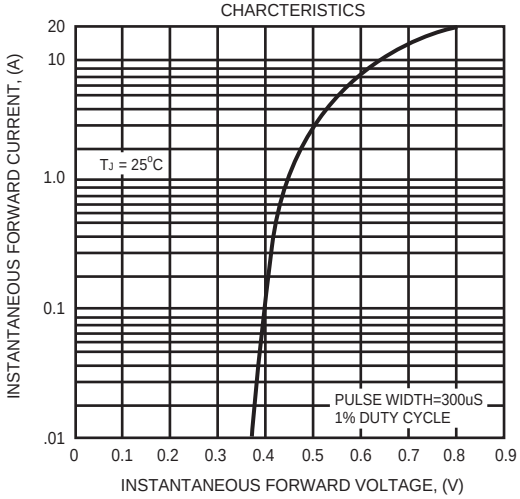


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

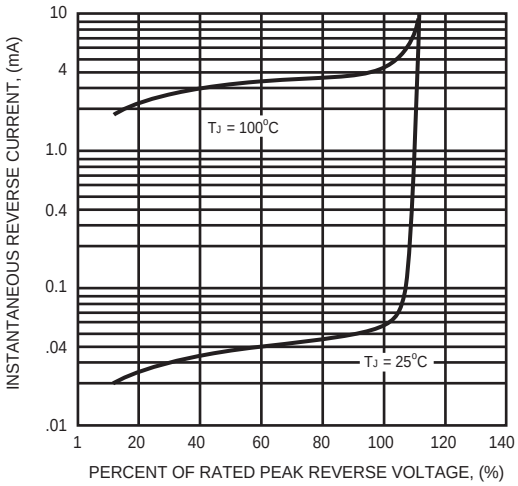


FIG. 5 - TYPICAL JUNCTION CAPACITANCE

