



CHENMKO ENTERPRISE CO.,LTD

**S16D30PT
THRU
S16D60PT**

Lead free devices

SCHOTTKY BARRIER RECTIFIER

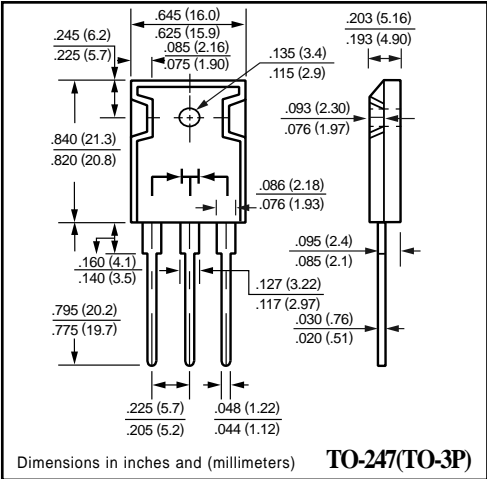
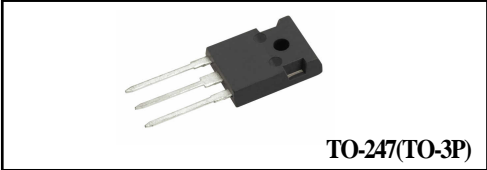
VOLTAGE RANGE 30 - 60 Volts CURRENT 16 Amperes

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-247 molded plastic
Terminals: Lead solderable per MIL-STD-750, Method 2026
Polarity: As marked
Weight: 5.6 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 RATINGS (At TA = 25°C unless otherwise noted)

RATINGS		SYMBOL	S16D30PT	S16D35PT	S16D40PT	S16D45PT	S16D50PT	S16D60PT	UNITS
Maximum Recurrent Peak Reverse Voltage		VRRM	30	35	40	45	50	60	Volts
Maximum RMS Voltage		VRMS	21	24	28	31	35	42	Volts
Maximum DC Blocking Voltage		VDC	30	35	40	45	50	60	Volts
Maximum Average Forward Rectified Current		Io	16.0						Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)		IFSM	200						Amps
Typical thermal resistance per leg (NOTE 1)		R θJC	2.5						°C / W
Operating and Storage Temperature Range		TJ, TSTG	-60 to +125						°C

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

CHARACTERISTICS		SYMBOL	S16D30PT	S16D35PT	S16D40PT	S16D45PT	S16D50PT	S16D60PT	UNITS	
Maximum Instantaneous Forward Voltage at 8.0 A DC		VF	0.55				0.70			Volts
Maximum instantaneous reverse current at rated DC blocking voltage per leg (NOTE 2)	Tc = 25°C	IR	5.0						mAmps	
	Tc = 100°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 (S16D30PT THRU S16D60PT)

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

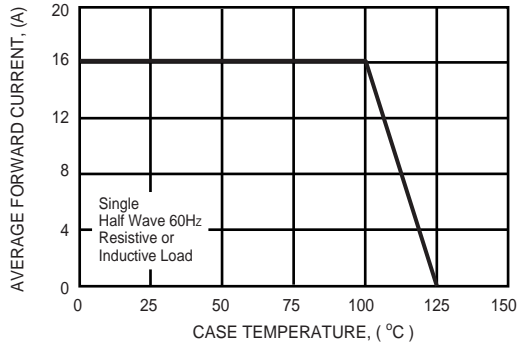


FIG. 2 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

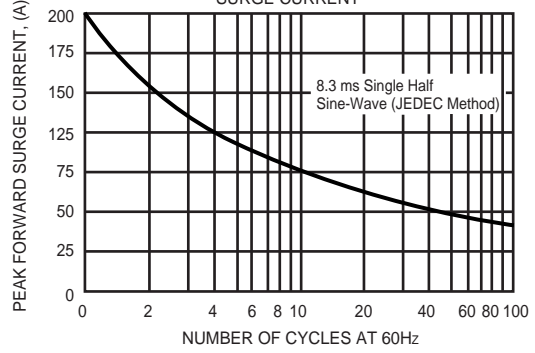


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

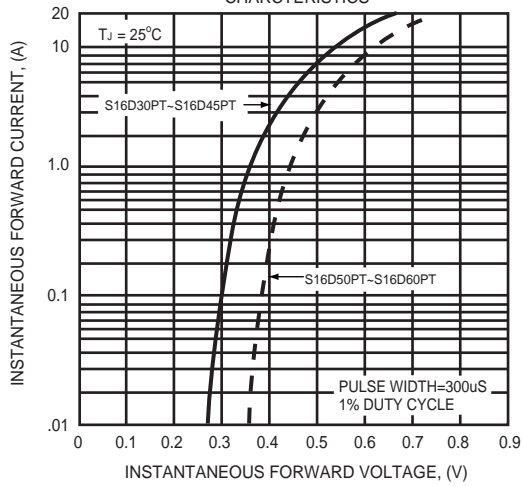


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

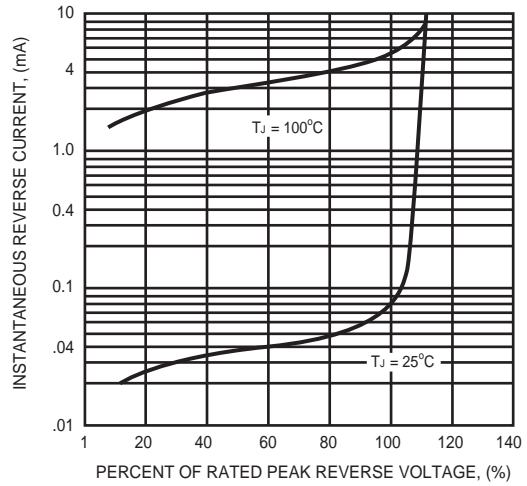


FIG. 5 - TYPICAL JUNCTION CAPACITANCE

