



CHENMKO ENTERPRISE CO.,LTD

Halogens free devices

SUPER FAST RECOVERY RECTIFIER

VOLTAGE RANGE 100 - 400 Volts CURRENT 16 Amperes

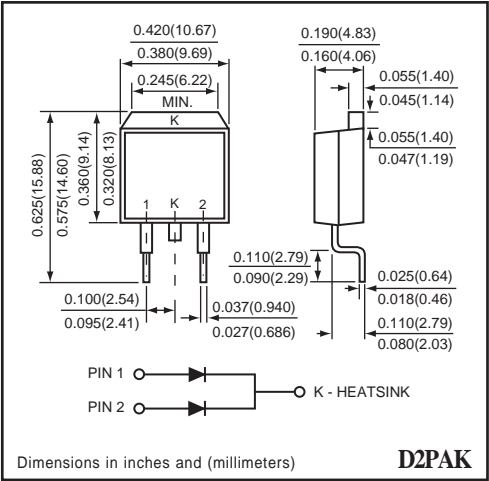
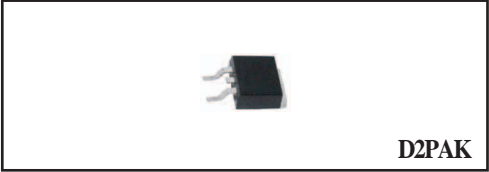
**U16U10GP
THRU
U16U40GP**

FEATURES

- * Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- * Dual rectifier construction, positive centertap
- * Glass passivated chip junctions
- * Low power loss
- * Low forward voltage, high current capability
- * High surge current capability
- * Superfast recovery times for high efficiency
- * High temperature soldering guaranteed : 260°C/10 seconds at terminals

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	U16U10GP	U16U20GP	U16U30GP	U16U40GP	UNITS
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	100	200	300	400	Volts
Maximum RMS Voltage	V _{RMS}	70	140	210	280	Volts
Maximum DC Blocking Voltage	V _{DC}	100	200	300	400	Volts
Maximum Average Forward Rectified Current	I _O	16.0				Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	I _{FSM}	200				Amps
Typical Junction capacitance per leg (NOTE 1)	C _J	85				pF
Typical thermal resistance (NOTE 2)	R _{θJC}	2.2				°C / W
Operating and Storage Temperature Range	T _J , T _{STG}	-55 to +150				°C

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

CHARACTERISTICS	SYMBOL	U16U10GP	U16U20GP	U16U30GP	U16U40GP	UNITS
Maximum Instantaneous Forward Voltage at 8.0 A DC	V _F	0.975		1.30		Volts
Maximum DC reverse current at rated DC blocking voltage per leg	I _R	5.0				uAmps
		150				
Maximum reverse recovery time (NOTE 3) per leg	t _{rr}	35		50		nS

NOTES : 1. Measured at 1.0 MHz and applied reverse voltage of 4.0 Volts
 2. Thermal resistance from junction to case per leg mounted on heatsink
 3. Reverse recovery test conditions : I_F = 0.5 A, I_r = -1.0 A, I_{rr} = -0.25 A.

RATING CHARACTERISTIC CURVES (U16U10GP THRU U16U40GP)

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

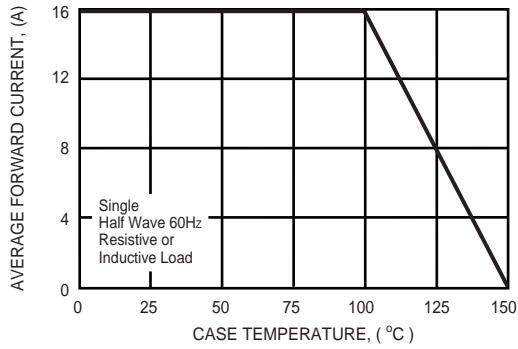


FIG. 2 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

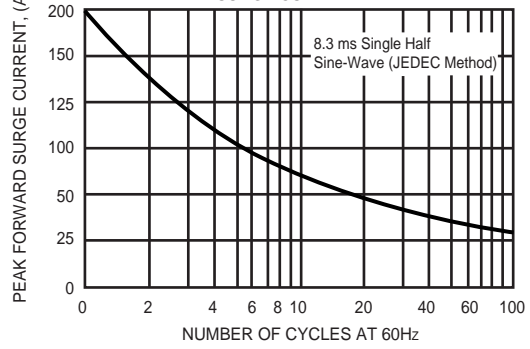


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

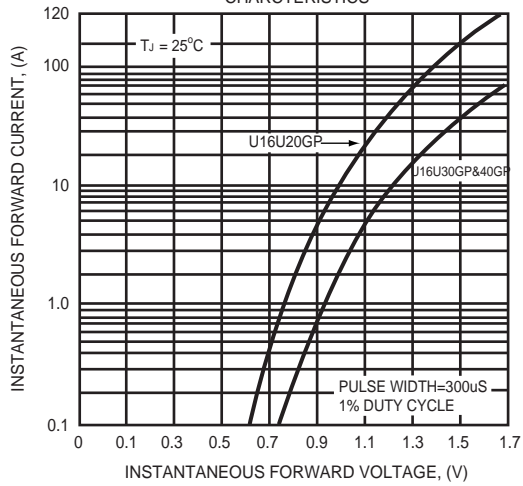


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

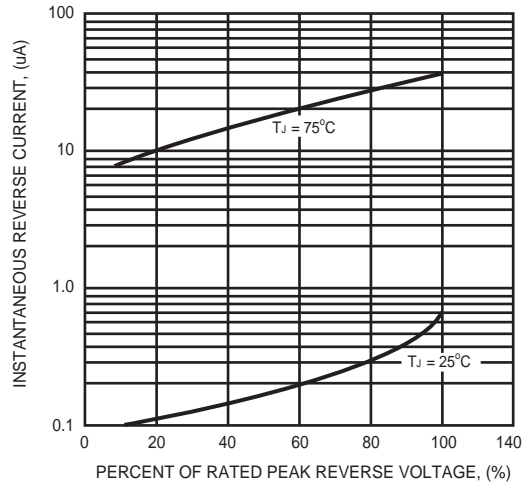


FIG. 5 - TYPICAL JUNCTION CAPACITANCE

