



CHENMKO ENTERPRISE CO.,LTD

**U16P20PT
THRU
U16P40PT**

Lead free devices

SUPER FAST RECOVERY RECTIFIER

VOLTAGE RANGE 200 - 400 Volts CURRENT 16 Amperes

FEATURES

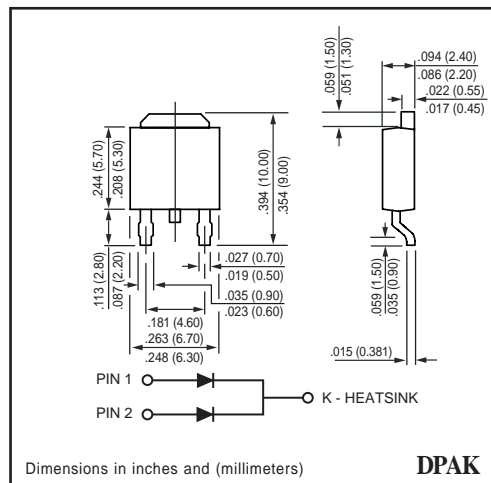
- * Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- * Dual rectifier construction, positive centertap
- * Glass passivated chip junctions
- * Low power loss
- * Low forward voltage, high current capability
- * High surge current capability
- * Superfast recovery times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

MECHANICAL DATA

Case: JEDEC 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 RATINGS (At TA = 25°C unless otherwise noted)

RATINGS	SYMBOL	U16P20PT	U16P30PT	U16P40PT	UNITS
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	200	300	400	Volts
Maximum RMS Voltage	V _{RMS}	140	210	280	Volts
Maximum DC Blocking Voltage	V _{DC}	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	U16P20PT	U16P30PT	U16P40PT	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			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 (U16P20PT THRU U16P40PT)

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

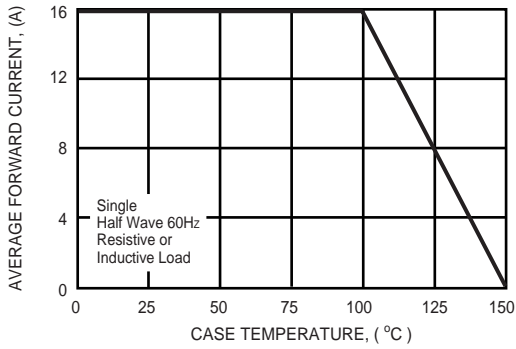


FIG. 2 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

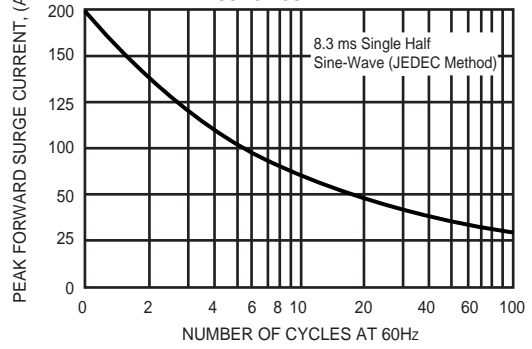


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

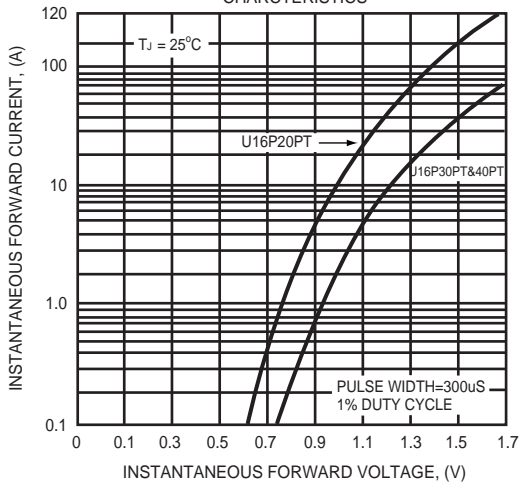


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

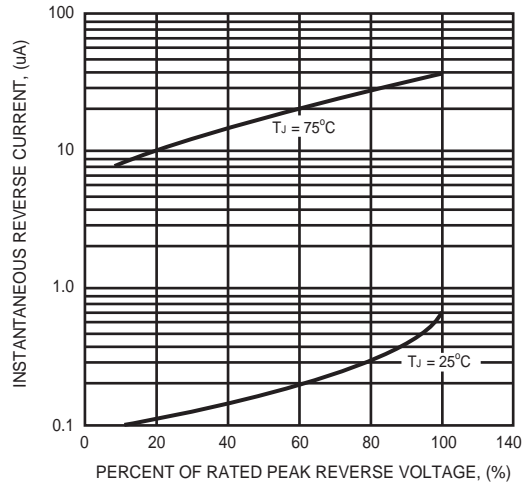


FIG. 5 - TYPICAL JUNCTION CAPACITANCE

