CHENMKO ENTERPRISE CO.,LTD

SUPER FAST RECOVERY RECTIFIER

VOLTAGE RANGE 200 - 400 Volts CURRENT 6 Amperes

U06P20PT
THRU
U06P40PT

Lead free devices

FEATURES

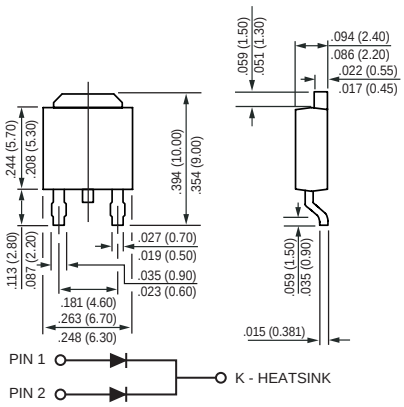
* Plastic package has Underwriters Laboratory Flammability Classification 94V-0
* Dual rectifier construction, positive centertap
* Glass passivated chip junctions
* Low power loss
* Low forward voltage, high current capability
* High surge current capability
* Superfast recovery times for high efficiency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



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)



Dimensions in inches and (millimeters)

DPAK

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	U06P20PT	U06P30PT	U06P40PT	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	6.0			Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	100			Amps
Typical Junction capacitance per leg (NOTE 1)	C_J	30			pF
Typical thermal resistance (NOTE 2)	$R_{\theta JC}$	5.0			°C / W
Operating and Storage Temperature Range	T_J, T_{STG}	-55 to +150			°C

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

CHARACTERISTICS		SYMBOL	U06P20PT	U06P30PT	U06P40PT	UNITS
Maximum Instantaneous Forward Voltage at 3.0 A DC		V_F	0.975	1.30		Volts
Maximum DC reverse current at rated DC blocking voltage per leg	T_C = 25°C	I_R	5.0			uAmps
	T_C = 100°C		150			
Maximum reverse recovery time (NOTE 3) per leg		trr	35			nS

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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 (U06P20PT THRU U06P40PT)

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

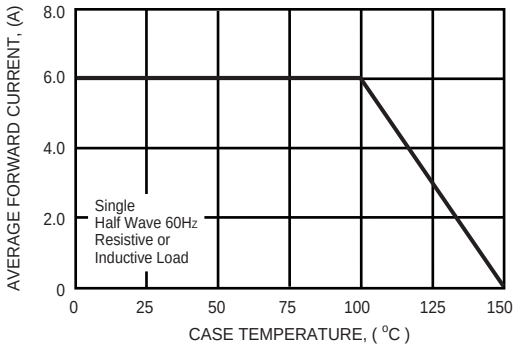


FIG. 2 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

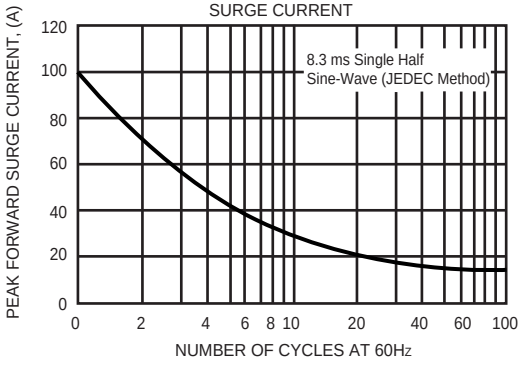


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARCTERISTICS

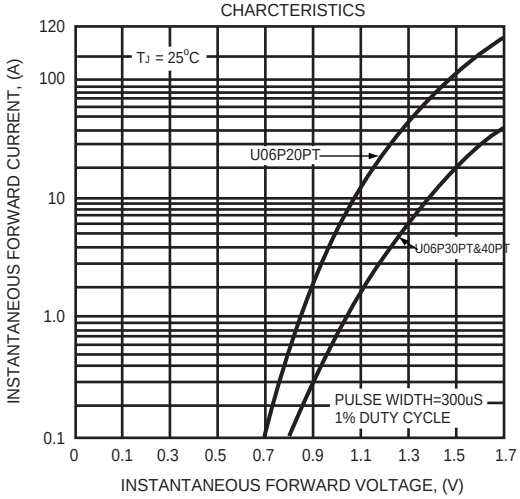


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

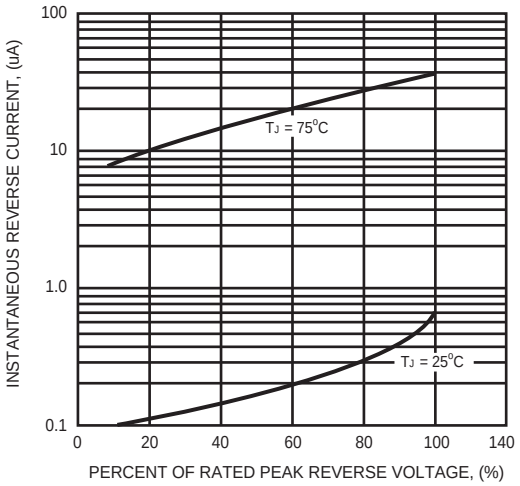


FIG. 5 - TYPICAL JUNCTION CAPACITANCE

