



CHENMKO ENTERPRISE CO.,LTD

SURFACE MOUNT GLASS PASSIVATED SUPER FAST SILICON RECTIFIER

VOLTAGE RANGE 50 - 1000 Volts CURRENT 4.0 Amperes

Lead free devices

**UPL41CTPT
THRU
UPL48CTPT**

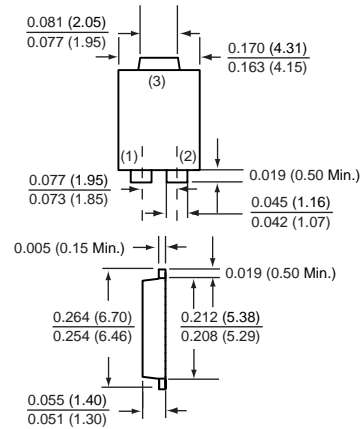
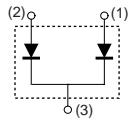
PROVISIONAL SPEC.

FEATURE

- *Small Surface Mounting Type. (SMP)
- * Low forward voltage, high current capability
- * Low leakage current
- * Glass passivated junction
- * High temperature soldering guaranteed :
260°C/10 seconds at terminals

SMP

CIRCUIT



Dimensions in inches and (millimeters)

SMP

MAXIMUM RATINGS (At TA = 25°C unless otherwise noted)

RATINGS	SYMBOL	UPL41CTPT	UPL42CTPT	UPL43CTPT	UPL44CTPT	UPL45CTPT	UPL46CTPT	UPL47CTPT	UPL48CTPT	UNITS
Maximum Recurrent Peak Reverse Voltage	VRRM	50	100	200	300	400	600	800	1000	Volts
Maximum RMS Voltage	VRMS	35	70	140	210	280	420	560	700	Volts
Maximum DC Blocking Voltage	Vdc	50	100	200	300	400	600	800	1000	Volts
Maximum Average Forward Rectified Current TL = 100°C	Io	4.0								Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	IFSM	50								Amps
Typical Junction Capacitance (Note 1)	CJ	30				20				pF
Operating and Storage Temperature Range	TJ, TSTG	-65 to +150								°C

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

CHARACTERISTICS	SYMBOL	UPL41CTPT	UPL42CTPT	UPL43CTPT	UPL44CTPT	UPL45CTPT	UPL46CTPT	UPL47CTPT	UPL48CTPT	UNITS
Maximum Instantaneous Forward Voltage at 2.0 A DC	VF	0.95				1.27	1.75			Volts
Maximum DC Reverse Current at Rated DC Blocking Voltage	@ TA = 25°C	5.0								uAmps
	@ TA = 100°C	100								uAmps
Maximum Reverse Recovery Time (Note 2)	trr	35				45				nSec

NOTES : 1. Measured at 1.0 MHz and applied reverse voltage of 4.0 volts
2. Test Conditions : IF = 0.5 A, IR = -1.0 A, IRR = -0.25 A

2004-7

RATING CHARACTERISTIC CURVES (UPL41CTPT THRU UPL48CTPT)

FIG. 1 - TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTIC

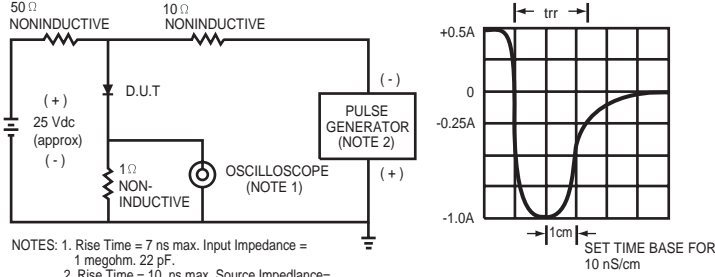


FIG. 2 - TYPICAL FORWARD CURRENT DERATING CURVE

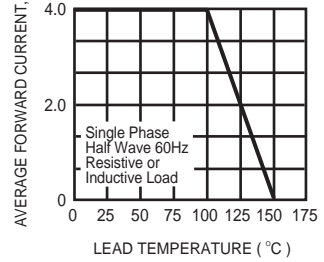


FIG. 3 - TYPICAL REVERSE CHARACTERISTICS

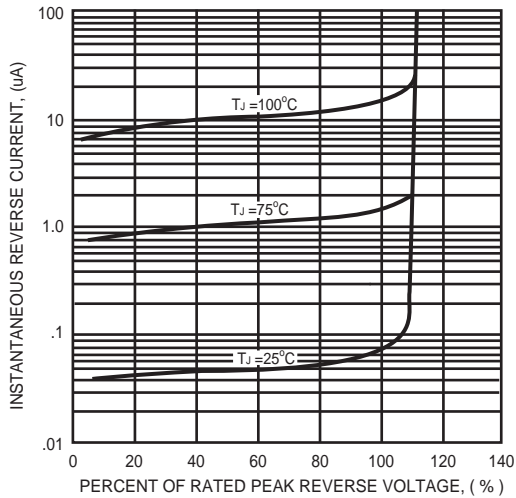


FIG. 4 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

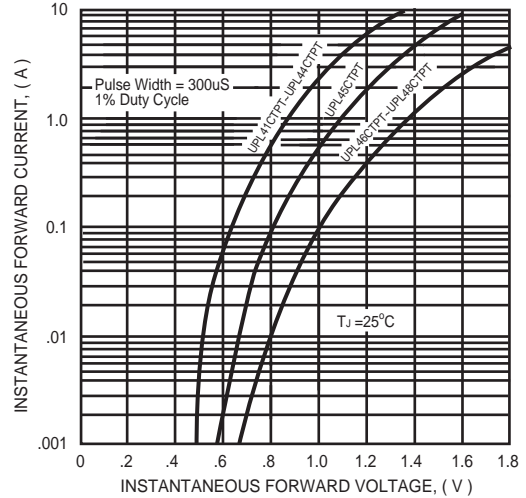


FIG. 5 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

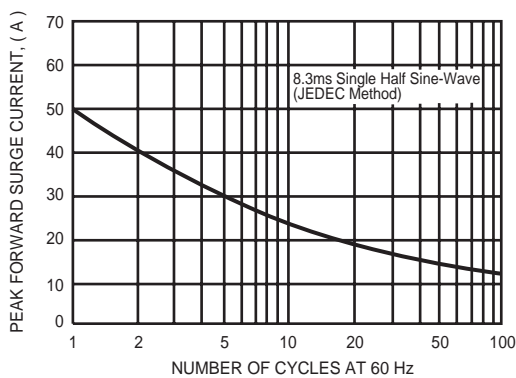


FIG. 6 - TYPICAL JUNCTION CAPACITANCE

