



CHENMKO ENTERPRISE CO.,LTD

**SURFACE MOUNT GLASS PASSIVATED
SUPER FAST SILICON RECTIFIER**

VOLTAGE RANGE 50 - 400 Volts CURRENT 5.0 Amperes

UPL51PT

THRU

UPL55PT

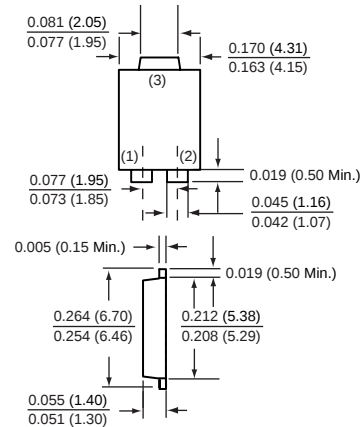
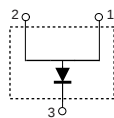
PROVISIONAL SPEC.

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	UPL51PT	UPL52PT	UPL53PT	UPL54PT	UPL55PT	UNITS
Maximum Recurrent Peak Reverse Voltage	VRRM	50	100	200	300	400	Volts
Maximum RMS Voltage	VRMS	35	70	140	210	280	Volts
Maximum DC Blocking Voltage	VDC	50	100	200	300	400	Volts
Maximum Average Forward Rectified Current TL = 90°C	Io	5.0					Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	IFSM	120					Amps
Typical Junction Capacitance (Note 1)	CJ	60					pF
Operating and Storage Temperature Range	TJ, TSTG	-65 to +150					°C

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

CHARACTERISTICS		SYMBOL	UPL51PT	UPL52PT	UPL53PT	UPL54PT	UPL55PT	UNITS
Maximum Instantaneous Forward Voltage at 3.0 A DC		V _F	0.975			1.30		Volts
Maximum DC Reverse Current	@ TA = 25°C	I _R	5.0					uAmps
at Rated DC Blocking Voltage	@ TA = 100°C		200					uAmps
Maximum Reverse Recovery Time (Note 2)		trr	35					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 (UPL51PT THRU UPL55PT)

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

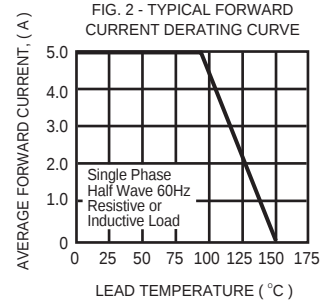
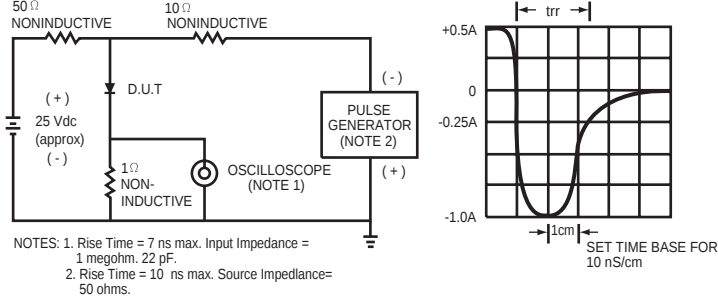


FIG. 3 - TYPICAL REVERSE CHARACTERISTICS

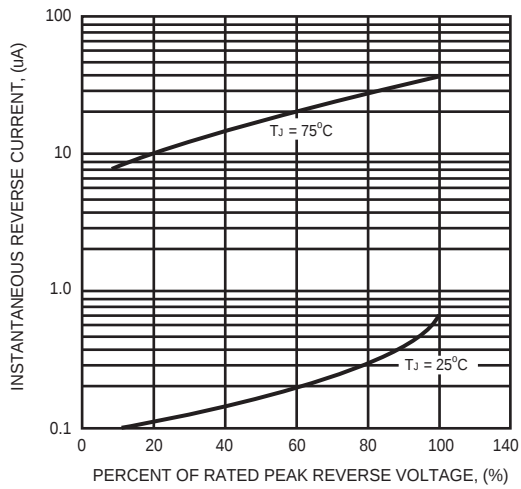


FIG. 4 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

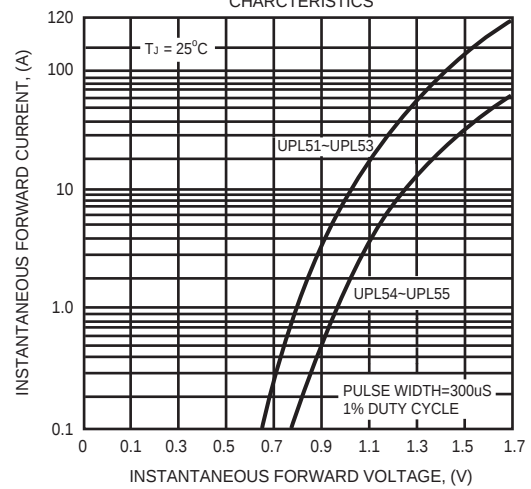


FIG. 5 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

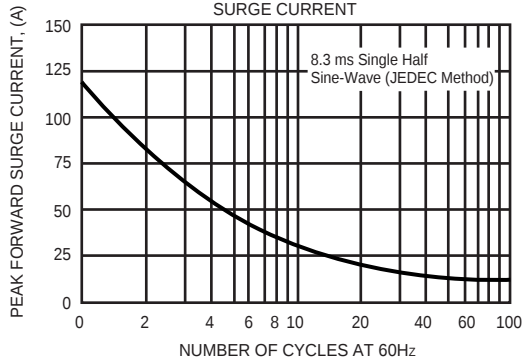


FIG. 6 - TYPICAL JUNCTION CAPACITANCE

