



CHENMKO ENTERPRISE CO.,LTD

**FPL11PT
THRU
FPL17PT**

Lead free devices

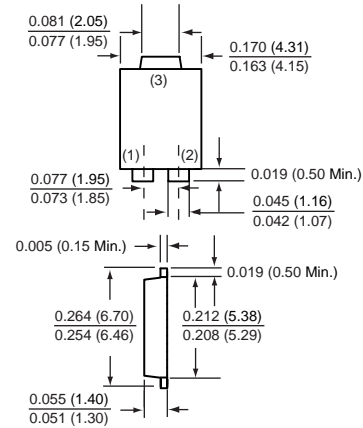
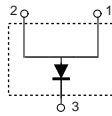
**SURFACE MOUNT GLASS PASSIVATED
FAST RECOVERY SILICON RECTIFIER**
VOLTAGE RANGE 50 - 1000 Volts CURRENT 1.0 Ampere

FEATURE

- *Small Surface Mounting Type. (SMP)
- * Low leakage current
- * Fast recovery times for high efficiency
- * 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	FPL11PT	FPL12PT	FPL13PT	FPL14PT	FPL15PT	FPL16PT	FPL17PT	UNITS	
Maximum Recurrent Peak Reverse Voltage		V _{RRM}	50	100	200	400	600	800	1000	Volts	
Maximum RMS Voltage		V _{RMS}	35	70	140	280	420	560	700	Volts	
Maximum DC Blocking Voltage		V _{DC}	50	100	200	400	600	800	1000	Volts	
Maximum Average Forward Rectified Current TL = 110°C		I _O	1.0							Amps	
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)		I _{FSM}					30				Amps
Typical Junction Capacitance (Note 1)		C _J					15				pF
Maximum Thermal Resistance	(Note 2)	R _{θJL}					30				°C / W
	(Note 3)	R _{θJA}					75				°C / W
Operating and Storage Temperature Range		T _J , T _{STG}	-65 to +150							°C	

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

CHARACTERISTICS	SYMBOL	FPL11PT	FPL12PT	FPL13PT	FPL14PT	FPL15PT	FPL16PT	FPL17PT	UNITS
Maximum Instantaneous Forward Voltage at 1.0 A DC	V _F	1.3							Volts
Maximum DC Reverse Current at Rated DC Blocking Voltage at TA = 25°C	I _R	5.0							uAmps
Maximum Full Load Reverse Current Average, Full Cycle at TA = 55°C		100							uAmps
Maximum Reverse Recovery Time (Note 4)	t _{rr}	150				250	500		nSec

- NOTES : 1. Measured at 1.0 MHz and applied reverse voltage of 4.0 volts
 2. Thermal Resistance Junction to terminal 6.0 mm² copper pads to each terminal
 3. Thermal Resistance Junction to ambient 6.0 mm² copper pads to each terminal
 4. Test Conditions : I_F = 0.5 A, I_R = -1.0 A, I_{RR} = -0.25 A

2004-7

RATING CHARACTERISTIC CURVES (FPL11PT THRU FPL17PT)

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

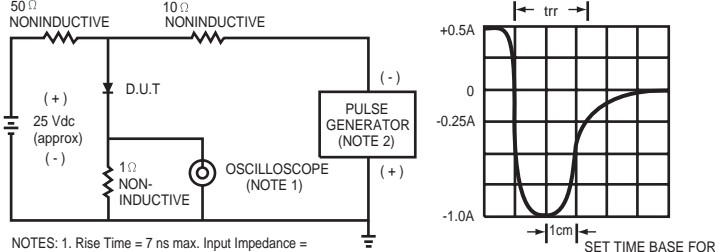


FIG. 2 - TYPICAL FORWARD CURRENT DERATING CURVE

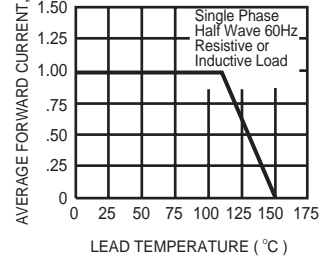


FIG. 3 - TYPICAL REVERSE CHARACTERISTICS

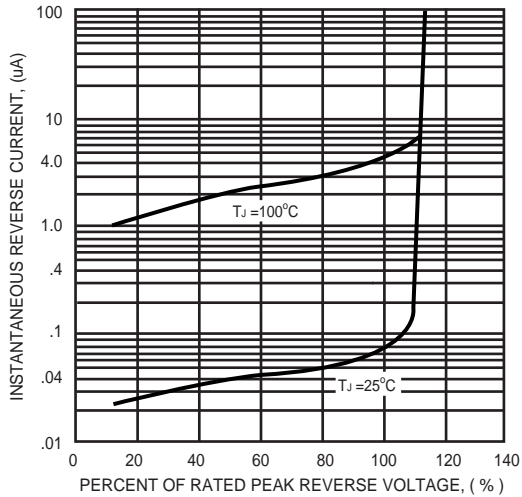


FIG. 4 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

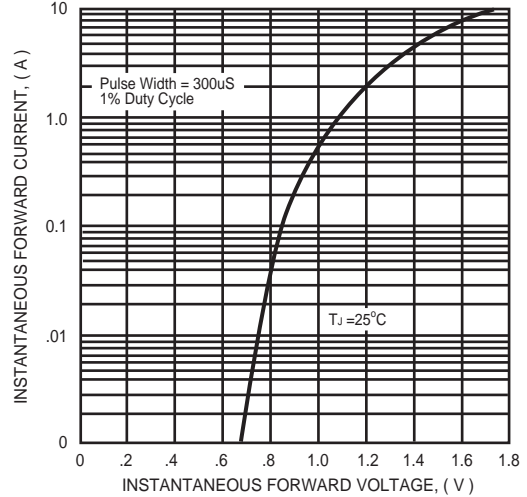


FIG. 5 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

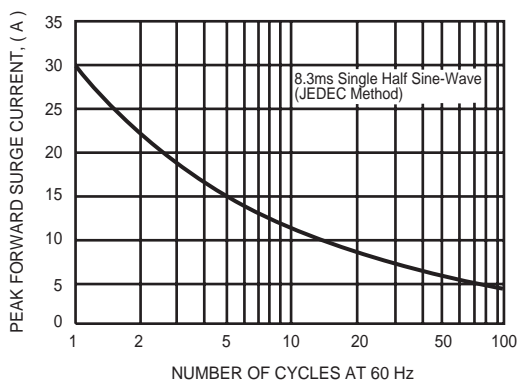


FIG. 6 - TYPICAL JUNCTION CAPACITANCE

