



**CHENMKO ENTERPRISE CO.,LTD**

**FPL31PT  
THRU  
FPL37PT**

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

**VOLTAGE RANGE 50 - 1000 Volts CURRENT 3.0 Amperes**

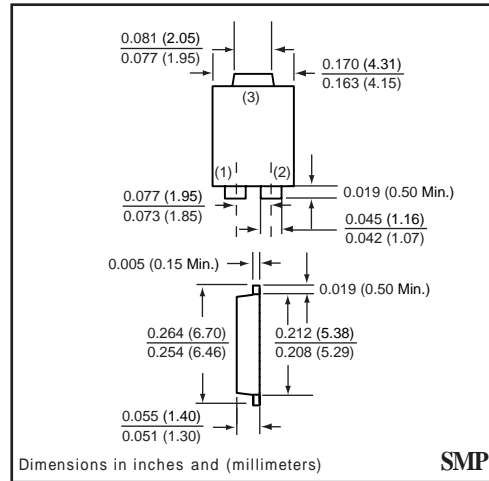
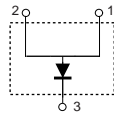
*Lead free devices*

**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



**CIRCUIT**



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

RATINGS	SYMBOL	FPL31PT	FPL32PT	FPL33PT	FPL34PT	FPL35PT	FPL36PT	FPL37PT	UNITS
Maximum Recurrent Peak Reverse Voltage	VRRM	50	100	200	400	600	800	1000	Volts
Maximum RMS Voltage	VRMS	35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage	Vdc	50	100	200	400	600	800	1000	Volts
Maximum Average Forward Rectified Current TL = 100°C	Io	3.0							Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	IFSM	100							Amps
Typical Junction Capacitance (Note 1)	CJ	65							pF
Operating and Storage Temperature Range	TJ, TSTG	-65 to +150							°C

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

CHARACTERISTICS	SYMBOL	FPL31PT	FPL32PT	FPL33PT	FPL34PT	FPL35PT	FPL36PT	FPL37PT	UNITS
Maximum Instantaneous Forward Voltage at 3.0 A DC	VF	1.3							Volts
Maximum DC Reverse Current at Rated DC Blocking Voltage	@ TA = 25°C	5.0							uAmps
	@ TA = 100°C	50							uAmps
Maximum Reverse Recovery Time (Note 2)	trr	150				250	500		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

## RATING CHARACTERISTIC CURVES ( FPL31PT THRU FPL37PT )

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

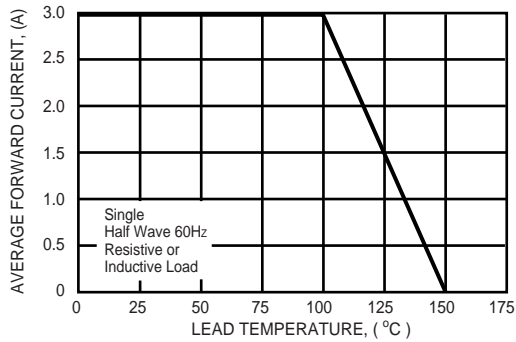


FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

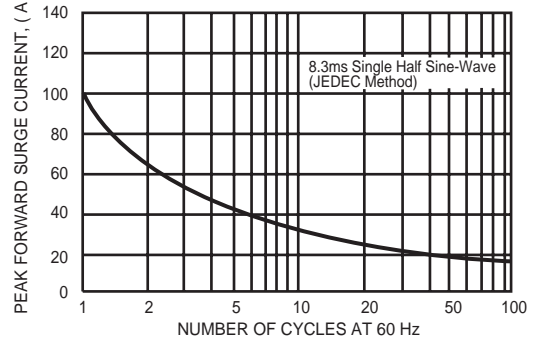


FIG. 3 - TYPICAL REVERSE CHARACTERISTICS PER BRIDGE ELEMENT

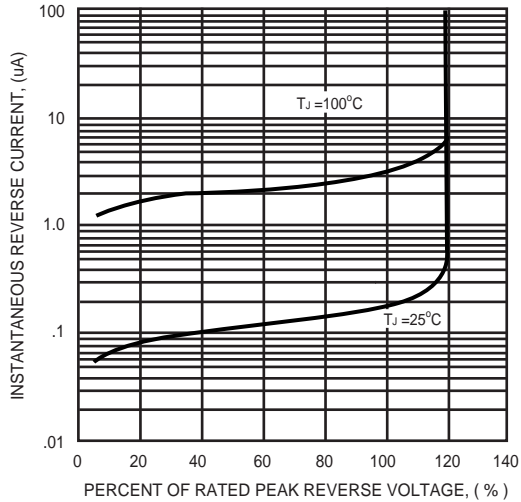


FIG. 4 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

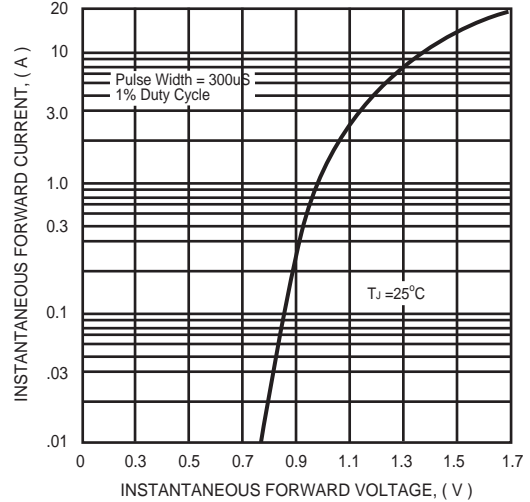


FIG. 5 - TYPICAL JUNCTION CAPACITANCE

