



# CHENMKO ENTERPRISE CO.,LTD

**1SS387PT**

## SURFACE MOUNT SWITCHING DIODE

VOLTAGE 85 Volts CURRENT 0.1 Ampere

Lead free devices

### APPLICATION

\* Low barrier diode for detectors up to GHz frequencies

### FEATURE

\* Small surface mounting type. (SC-79/SOD-523)  
\* Low VF and low IR  
\* High reliability

### CONSTRUCTION

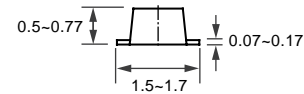
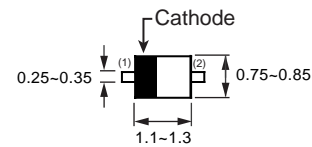
\* Silicon epitaxial planar

### MARKING

\* G



SC-79/SOD-523



Dimensions in millimeters

SC-79/SOD-523

### CIRCUIT



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

RATINGS	SYMBOL	1SS387PT			UNITS
		MIN.	TYP.	MAX.	
Maximum Recurrent Peak Reverse Voltage	VRRM	-	-	85	Volts
Maximum Reverse DC voltage	VDC	-	-	80	Volts
Maximum Peak Forward Rectified Current	IFM	-	-	200	mA
Maximum Average Forward Rectified Current	Io	-	-	100	mA
Total Power Dissipation	PTOT	-	-	150	mW
Typical Surge Current (@ 10ms Half-Sine Wave)	IFSM	-	-	1	Amp
Typical Junction Capacitance between Terminal (Note 1)	CJ	-	0.5	3.0	pF
Typical Reverse Recovery Time	TRR	-	1.6	4.0	nSec
Operating and Storage Temperature Range	TJ, TSTG	-55	-	+125	°C

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

CHARACTERISTICS	SYMBOL	1SS387PT			UNITS
		MIN.	TYP.	MAX.	
Maximum Instantaneous Forward Voltage	@IF= 1mA	VF(1)	-	0.62	Volts
	@IF= 10mA	VF(2)	-	0.75	
	@IF= 100mA	VF(3)	-	0.97	
Maximum Average Reverse Current	@VR= 30V	IR(1)	-	-	uAmps
	@VR= 80V	IR(2)	-	-	

NOTES : 1. Measured at 1.0 MHz and applied reverse voltage of 0 volts.  
2. Mounted on a glass epoxy circuit board of 20 X 20mm, pad dimension of 4 X 4mm.  
2. ESD sensitive product handling required.

# RATING CHARACTERISTIC CURVES ( 1SS387PT )

FIG. 1 - FORWARD CHARACTERISTICS

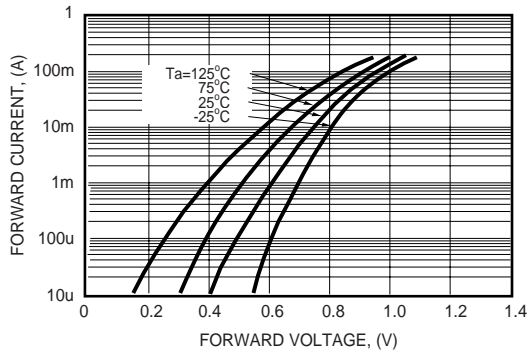


FIG. 2 - REVERSE CHARACTERISTICS

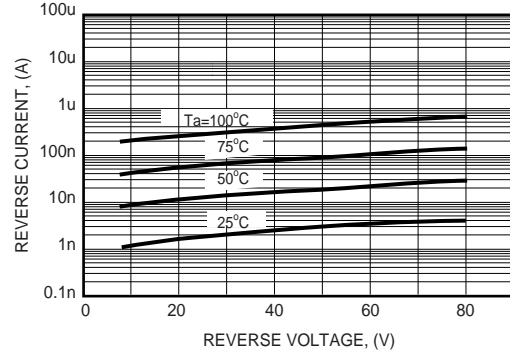


FIG. 3 - TYPICAL JUNCTION CAPACITANCE

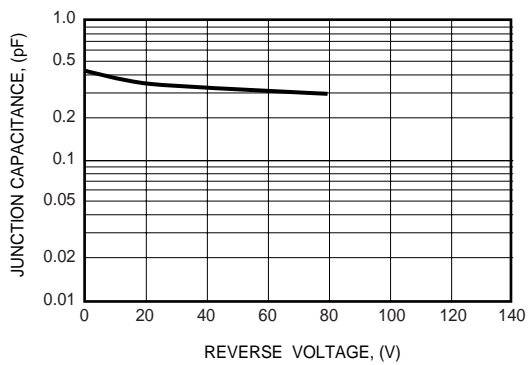


FIG. 4 - POWER DERATING CURVE

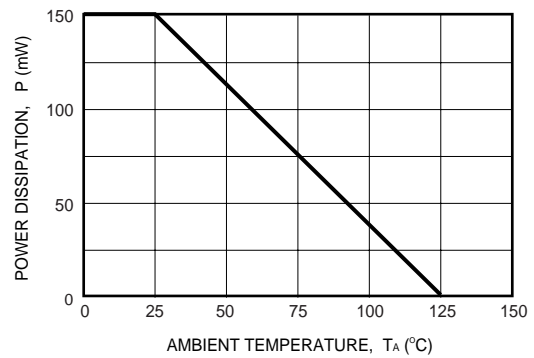


FIG. 5 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

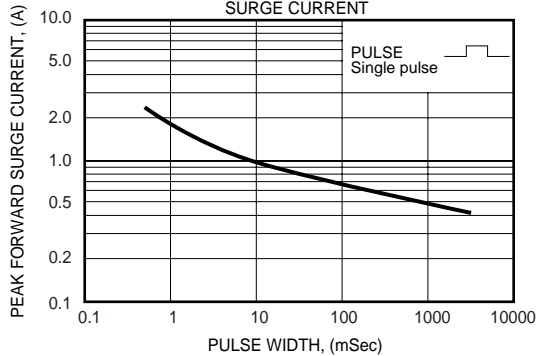


FIG. 6 - REVERSE RECOVERY TIME MEASUREMENT CIRCUIT

