



CHENMKO ENTERPRISE CO.,LTD

1SS358PT

SURFACE MOUNT SWITCHING DIODE

VOLTAGE 90 Volts CURRENT 0.1 Ampere

Lead free devices

APPLICATION

- * Ultra high speed switching

FEATURE

- * Small surface mounting type. (SC-76/SOD-323)
- * High speed. ($T_{RR}=1.2nSec$ Typ.)
- * Suitable for high packing density.
- * Peak forward current is 225mA.
- * High reliability with high surge current handling capability.

CONSTRUCTION

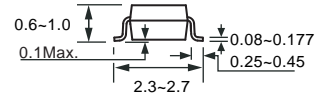
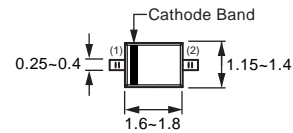
- * Silicon epitaxial planar

MARKING

- * 1D



SC-76/SOD-323



Dimensions in millimeters

SC-76/SOD-323

CIRCUIT



MAXIMUM RATINGS (At $T_A = 25^\circ C$ unless otherwise noted)

RATINGS	SYMBOL	1SS358PT	UNITS
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	90	Volts
Maximum RMS Voltage	V_{RMS}	63	Volts
Maximum DC Blocking Voltage	V_{DC}	80	Volts
Maximum Average Forward Rectified Current	I_o	0.1	Amps
Peak Forward Surge Current at 1Sec.	I_{FSM}	0.5	Amps
Typical Junction Capacitance between Terminal (Note 1)	C_J	3.0	pF
Maximum Reverse Recovery Time (Note 2)	T_{RR}	4.0	nSec
Maximum Operating Temperature Range	T_J	+125	$^\circ C$
Storage Temperature Range	T_{STG}	-55 to +125	$^\circ C$

ELECTRICAL CHARACTERISTICS (At $T_A = 25^\circ C$ unless otherwise noted)

CHARACTERISTICS	SYMBOL	1SS358PT	UNITS
Maximum Instantaneous Forward Voltage at $I_f = 100mA$	V_F	1.20	Volts
Maximum Average Reverse Current at $V_R = 80V$	I_R	250	mAmps

- NOTES : 1. Measured at 1.0 MHz and applied reverse voltage of 6.0 volts.
 2. Measured at applied forward current of 10mA and reverse voltage of 6.0 volts.
 3. ESD sensitive product handling required.

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RATING CHARACTERISTIC CURVES (1SS358PT)

FIG. 1 - FORWARD CHARACTERISTICS

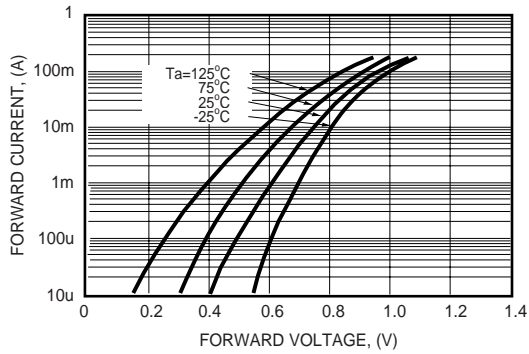


FIG. 2 - REVERSE CHARACTERISTICS

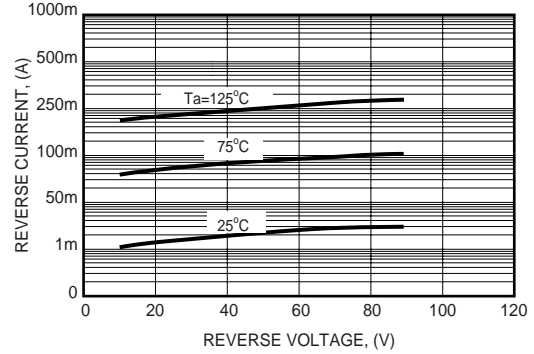


FIG. 3 - TYPICAL JUNCTION CAPACITANCE

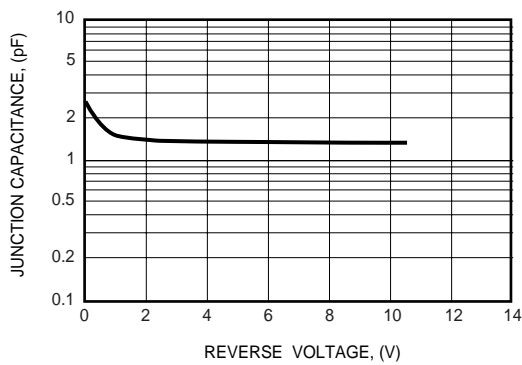


FIG. 4 - REVERSE RECOVERY TIME CHARACTERISTICS

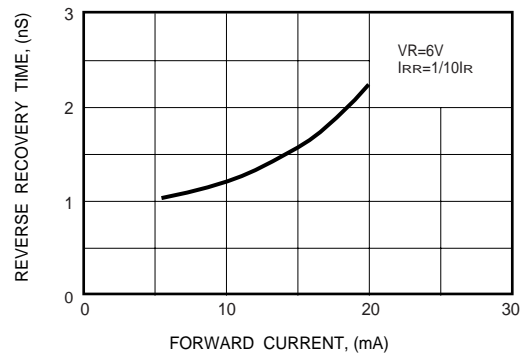


FIG. 5 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

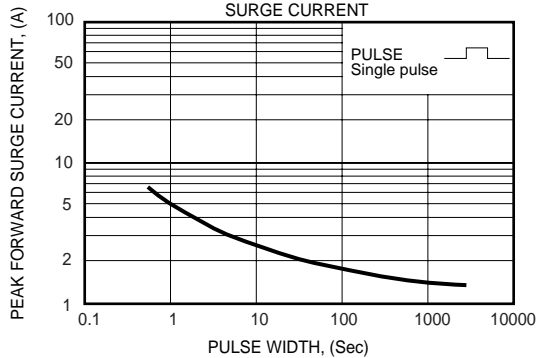


FIG. 6 - REVERSE RECOVERY TIME MEASUREMENT CIRCUIT

