



# CHENMKO ENTERPRISE CO.,LTD

**CHN222MPT**

Lead free devices

## SURFACE MOUNT SWITCHING DIODE

VOLTAGE 80 Volts CURRENT 0.1 Ampere

### APPLICATION

- \* Ultra high speed switching

### FEATURE

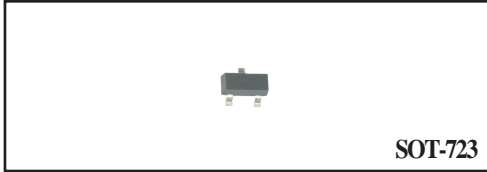
- \* Small surface mounting type. (SOT-723)
- \* High speed. ( $T_{RR}=1.5\text{nSec}$  Typ.)
- \* Suitable for high packing density.
- \* Maximum total power dissipation is 150mW.
- \* Peak forward current is 300mA.

### CONSTRUCTION

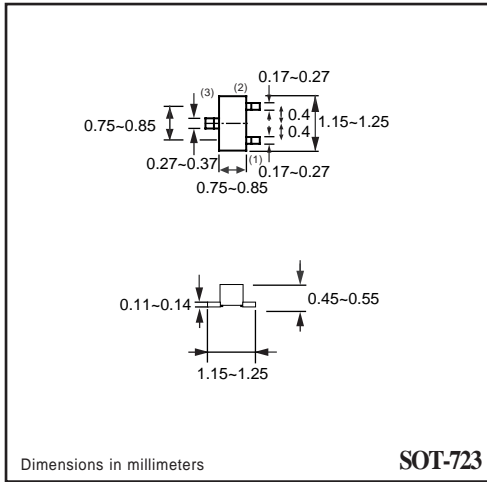
- \* Silicon epitaxial planar

### MARKING

- \* 22



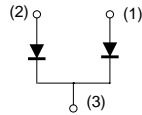
SOT-723



Dimensions in millimeters

SOT-723

### CIRCUIT



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

RATINGS	SYMBOL	CHN222MPT	UNITS
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	80	Volts
Maximum RMS Voltage	$V_{RMS}$	56	Volts
Maximum DC Blocking Voltage	$V_{DC}$	80	Volts
Maximum Average Forward Rectified Current	$I_o$	0.1	Amps
Peak Forward Surge Current at 1uSec.	$I_{FSM}$	4.0	Amps
Typical Junction Capacitance between Terminal (Note 1)	$C_J$	3.5	pF
Maximum Reverse Recovery Time (Note 2)	$T_{RR}$	4.0	nSec
Maximum Operating Temperature Range	$T_J$	+150	$^\circ\text{C}$
Storage Temperature Range	$T_{STG}$	-55 to +150	$^\circ\text{C}$

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

CHARACTERISTICS	SYMBOL	CHN222MPT	UNITS
Maximum Instantaneous Forward Voltage at $I_F = 100\text{mA}$	$V_F$	1.20	Volts
Maximum Average Reverse Current at $V_R = 70\text{V}$	$I_R$	0.1	$\mu\text{Amps}$

- NOTES : 1. Measured at 1.0 MHz and applied reverse voltage of 6.0 volts.  
 2. Measured at applied forward current of 5mA and reverse voltage of 6.0 volts.  
 3. ESD sensitive product handling required.

## RATING CHARACTERISTIC CURVES ( CHN222MPT)

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

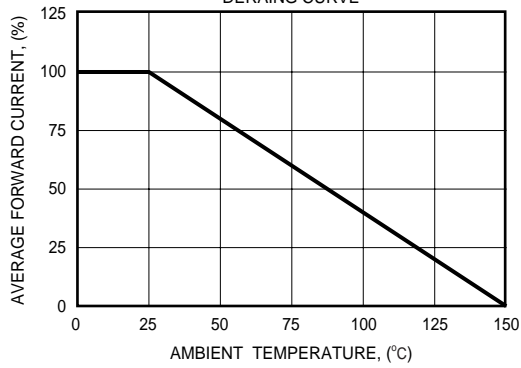


FIG. 2 - FORWARD CHARACTERISTICS

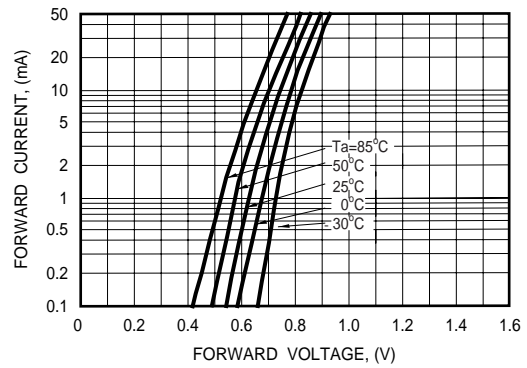


FIG. 3 - TYPICAL JUNCTION CAPACITANCE

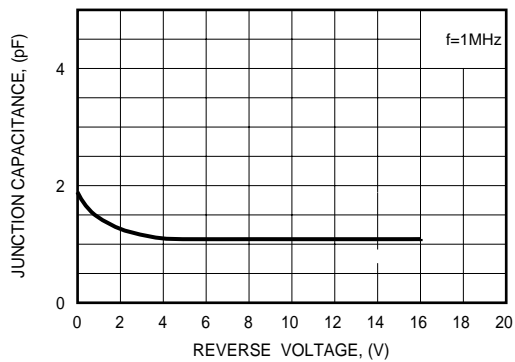


FIG. 4 - REVERSE CHARACTERISTICS

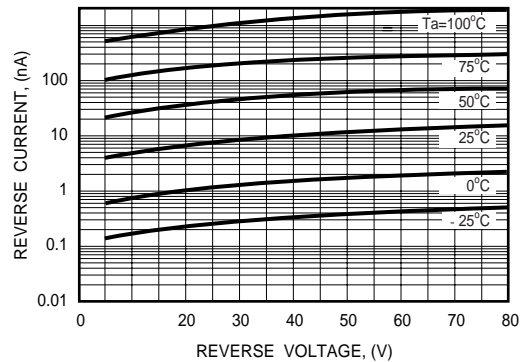


FIG. 5 - REVERSE RECOVERY TIME

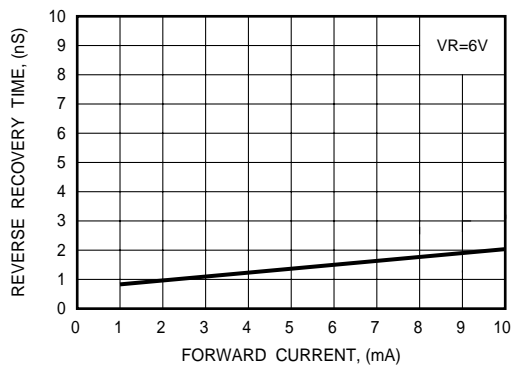


FIG. 6 - REVERSE RECOVERY TIME MEASUREMENT CIRCUIT

