



CHENMKO ENTERPRISE CO.,LTD

Lead free devices

**SURFACE MOUNT
SWITCHING DIODE**

VOLTAGE 80 Volts CURRENT 0.1 Ampere

CHN222M1PT

APPLICATION

- * Ultra high speed switching

FEATURE

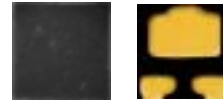
- * Small surface mounting type. (FBPT-723)
- * High speed. ($T_{RR}=1.5\text{nSec}$ Typ.)
- * Suitable for high packing density.
- * Maximum total power dissipation is 150mW.
- * Peak forward current is 300mA.

CONSTRUCTION

- * Silicon epitaxial planar

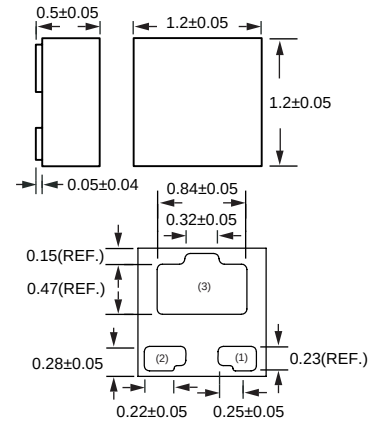
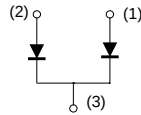
MARKING

- * 22



FBPT-723

CIRCUIT



Dimensions in millimeters

FBPT-723

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

RATINGS	SYMBOL	CHN222M1PT	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	CHN222M1PT	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	μAmps

- 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.

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RATING CHARACTERISTIC CURVES (CHN222M1PT)

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

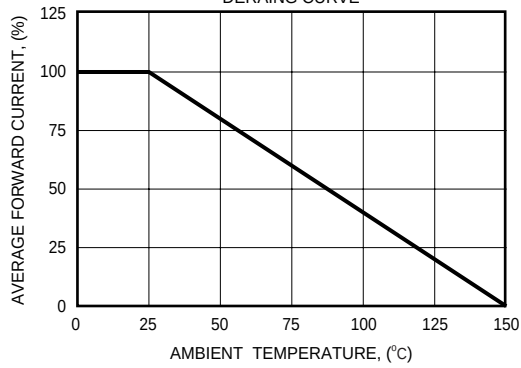


FIG. 2 - FORWARD CHARACTERISTICS

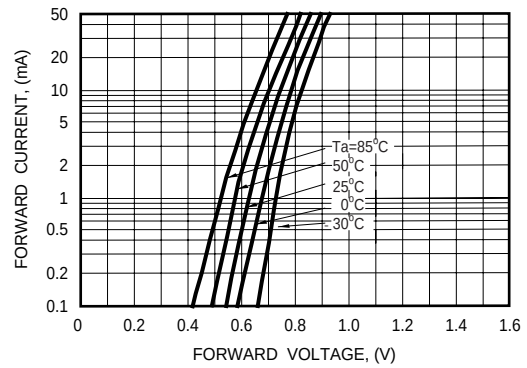


FIG. 3 - TYPICAL JUNCTION CAPACITANCE

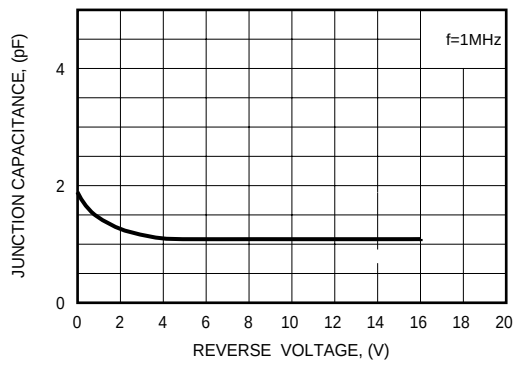


FIG. 4 - REVERSE CHARACTERISTICS

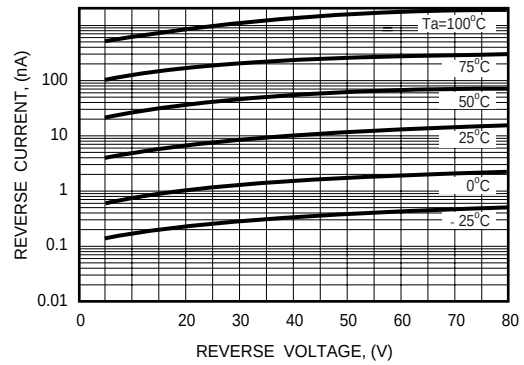


FIG. 5 - REVERSE RECOVERY TIME

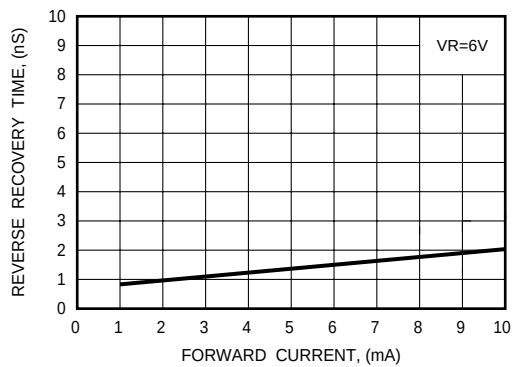


FIG. 6 - REVERSE RECOVERY TIME MEASUREMENT CIRCUIT

