



**CHENMKO ENTERPRISE CO.,LTD**

*Lead free devices*

**SURFACE MOUNT  
SWITCHING DIODE**  
**VOLTAGE 85 Volts CURRENT 0.125 Ampere**

**CHN203N1PT**

**APPLICATION**

- \* Ultra high speed switching

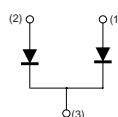
**FEATURE**

- \* Small surface mounting type. (FBPT-923)
- \* High speed. (TRR=1.5nSec Typ.)
- \* Suitable for high packing density.
- \* Peak forward current is 500mA.

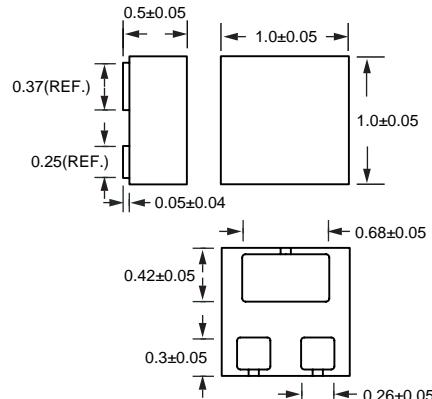
**CONSTRUCTION**

- \* Silicon epitaxial planar

**CIRCUIT**



**FBPT-923**



Dimensions in millimeters

**FBPT-923**

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

RATINGS	SYMBOL	CHN203N1PT	UNITS
Maximum Recurrent Peak Reverse Voltage	VR <sub>RM</sub>	85	Volts
Maximum RMS Voltage	V <sub>RMS</sub>	56	Volts
Maximum DC Blocking Voltage	V <sub>D</sub> C	80	Volts
Maximum Average Forward Rectified Current	I <sub>O</sub>	0.125	Amps
Peak Forward Surge Current at 1uSec.	I <sub>FSM</sub>	4.0	Amps
Typical Junction Capacitance between Terminal (Note 1)	C <sub>J</sub>	1.5	pF
Maximum Reverse Recovery Time (Note 2)	T <sub>RR</sub>	4.0	nSec
Maximum Operating Temperature Range	T <sub>J</sub>	+150	°C
Storage Temperature Range	T <sub>STG</sub>	-65 to +150	°C

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

CHARACTERISTICS	SYMBOL	CHN203N1PT	UNITS
Maximum Instantaneous Forward Voltage at I <sub>F</sub> = 100mA	V <sub>F</sub>	1.20	Volts
Maximum Average Reverse Current at V <sub>R</sub> = 80V	I <sub>R</sub>	0.5	uAmps

NOTES : 1. Measured at 1.0 MHz and applied reverse voltage of 0 volts.

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2. Measured at applied forward current of 10mA to reverse current of 10mA; RL=100 Ohms.

3. ESD sensitive product handling required.

## RATING CHARACTERISTIC CURVES ( CHN203N1PT )

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

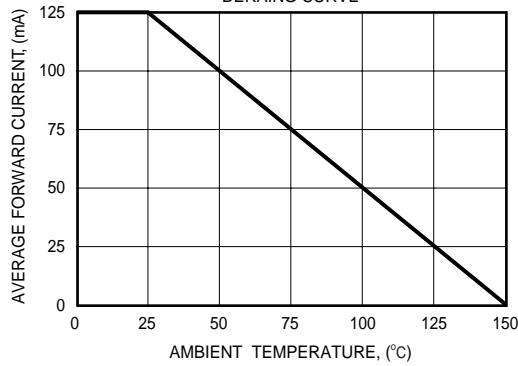


FIG. 2 - FORWARD CHARACTERISTICS

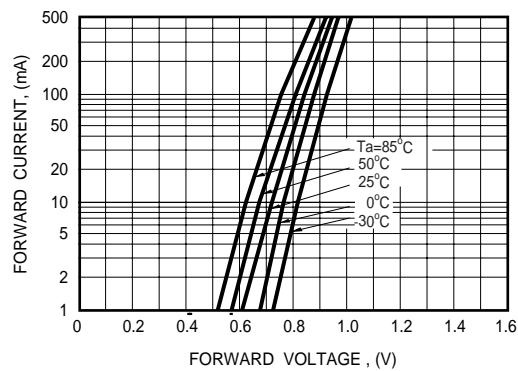


FIG. 3 - REVERSE CHARACTERISTICS

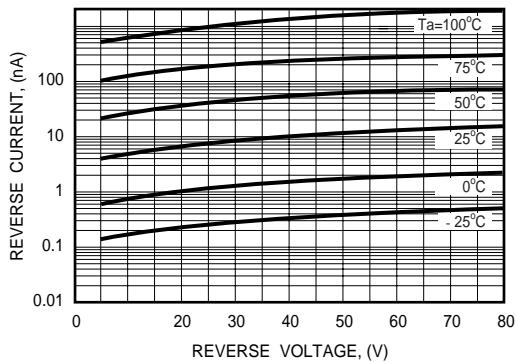


FIG. 4 - TYPICAL JUNCTION CAPACITANCE

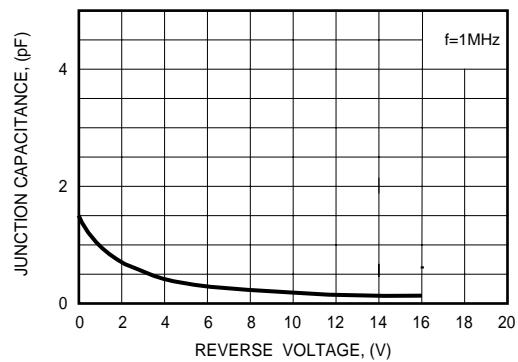


FIG. 5 - REVERSE RECOVERY TIME

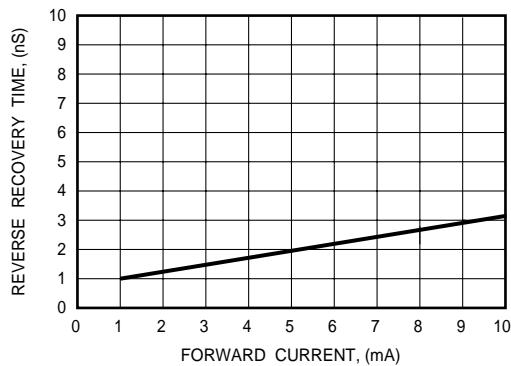


FIG. 6 - REVERSE RECOVERY TIME MEASUREMENT CIRCUIT

