



**CHENMKO ENTERPRISE CO.,LTD**

**SURFACE MOUNT**

**SCHOTTKY BARRIER DIODE**  
**VOLTAGE 30 Volts CURRENT 0.5 Ampere**

**CH551N1PT**

*Lead free devices*

**APPLICATION**

- \* Ultra high-speed switching
- \* Voltage clamping
- \* Protection circuit
- \* Low current rectification
- \* Low power consumption applications

**FEATURE**

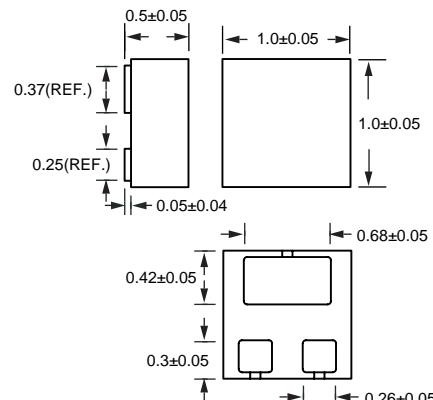
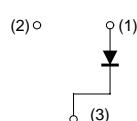
- \* Small surface mounting type. (FBPT-923)
- \* Ultra low VF. (VF=0.41V Typ. at 0.5A)
- \* High reliability

**CONSTRUCTION**

- \* Silicon epitaxial planar

**FBPT-923**

**CIRCUIT**



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

RATINGS	SYMBOL	CH551N1PT	UNITS
Maximum Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	30	Volts
Maximum RMS Voltage	V <sub>RMS</sub>	21	Volts
Maximum DC Blocking Voltage	V <sub>DC</sub>	20	Volts
Maximum Average Forward Rectified Current	I <sub>o</sub>	0.5	Amps
Peak Forward Surge Current at 8.3 mSec single half sine-wave	I <sub>FSM</sub>	2.0	Amps
Typical Junction Capacitance between Terminal (Note 1)	C <sub>J</sub>	15	pF
Maximum Operating Temperature Range	T <sub>J</sub>	+125	°C
Storage Temperature Range	T <sub>STG</sub>	-40 to +125	°C

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

CHARACTERISTICS	SYMBOL	CH551N1PT	UNITS
Maximum Instantaneous Forward Voltage at I <sub>F(1)</sub> = 100mA	V <sub>F(1)</sub>	0.36	Volts
Maximum Instantaneous Forward Voltage at I <sub>F(2)</sub> = 500mA	V <sub>F(2)</sub>	0.47	Volts
Maximum Average Reverse Current at V <sub>R</sub> = 20V	I <sub>R</sub>	100	uAmps

NOTES : 1. Measured at 1.0 MHz and applied reverse voltage of 10.0 volts.  
2. ESD sensitive product handling required.

2006-07

## RATING CHARACTERISTIC CURVES ( CH551N1PT )

FIG. 1 - FORWARD CHARACTERISTICS

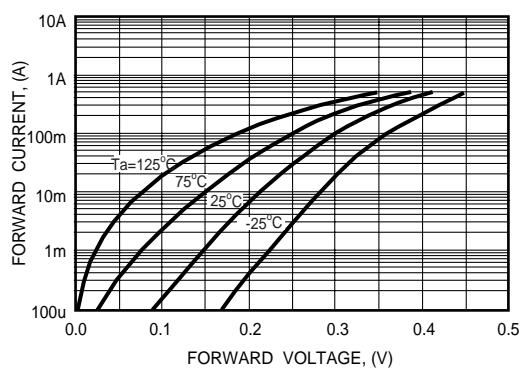


FIG. 2 - REVERSE CHARACTERISTICS

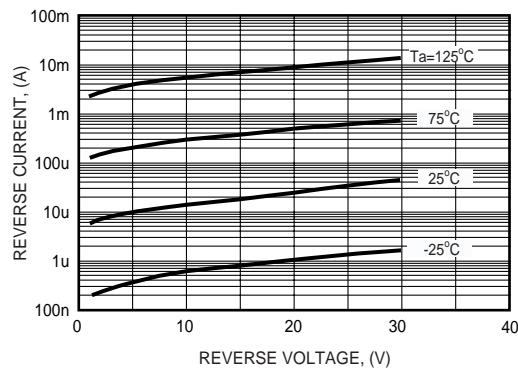


FIG. 3 - TYPICAL JUNCTION CAPACITANCE

