



**CHENMKO ENTERPRISE CO.,LTD**

**SURFACE MOUNT**

**SCHOTTKY BARRIER DIODE**

**VOLTAGE 30 Volts CURRENT 0.5 Ampere**

**CH551N1GP**

*Halogens free devices*

**APPLICATION**

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

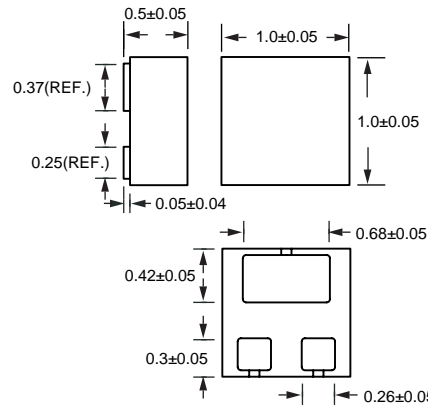
**FEATURE**

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

**CONSTRUCTION**

- \* Silicon epitaxial planar

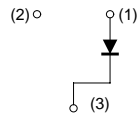
**FBPT-923**



Dimensions in millimeters

**FBPT-923**

**CIRCUIT**



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

RATINGS	SYMBOL	CH551N1GP	UNITS
Maximum Recurrent Peak Reverse Voltage	VRRM	30	Volts
Maximum RMS Voltage	VRMS	21	Volts
Maximum DC Blocking Voltage	VDC	20	Volts
Maximum Average Forward Rectified Current	Io	0.5	Amps
Peak Forward Surge Current at 8.3 mSec single half sine-wave	IFSM	2.0	Amps
Typical Junction Capacitance between Terminal (Note 1)	CJ	15	pF
Maximum Operating Temperature Range	TJ	+125	°C
Storage Temperature Range	TSTG	-40 to +125	°C

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

CHARACTERISTICS	SYMBOL	CH551N1GP	UNITS
Maximum Instantaneous Forward Voltage at If(1)= 100mA	Vf(1)	0.36	Volts
Maximum Instantaneous Forward Voltage at If(2)= 500mA	Vf(2)	0.47	Volts
Maximum Average Reverse Current at Vr= 20V	IR	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 ( CH551N1GP )

FIG. 1 - FORWARD CHARACTERISTICS

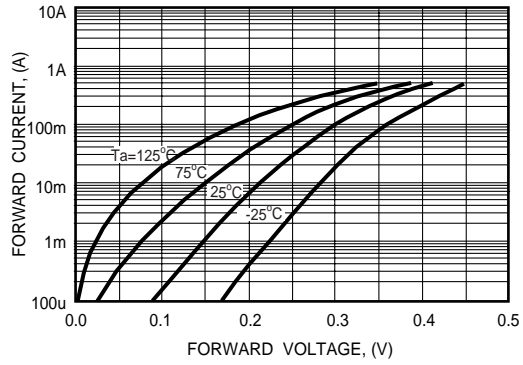


FIG. 2 - REVERSE CHARACTERISTICS

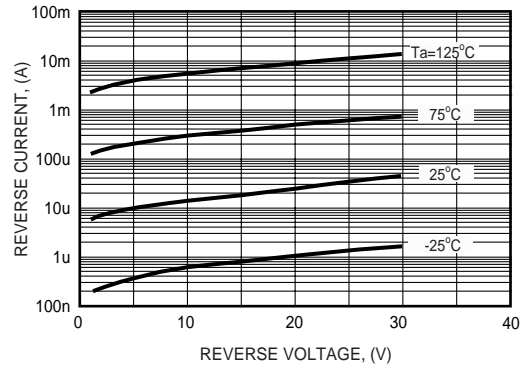


FIG. 3 - TYPICAL JUNCTION CAPACITANCE

