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

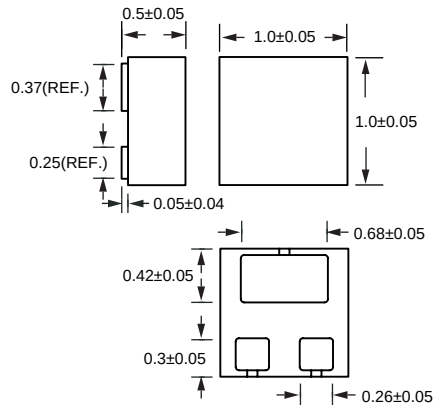
FEATURE

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

CONSTRUCTION

* Silicon epitaxial planar

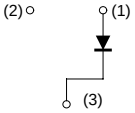
FBPT-923



Dimensions in millimeters

FBPT-923

CIRCUIT



MAXIMUM RATINGES (At T_A = 25°C unless otherwise noted)

RATINGS	SYMBOL	CH551N1PT	UNITS
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	30	Volts
Maximum RMS Voltage	V_{RMS}	21	Volts
Maximum DC Blocking Voltage	V_{DC}	20	Volts
Maximum Average Forward Rectified Current	I_O	0.5	Amps
Peak Forward Surge Current at 8.3 mSec single half sine-wave	I_{FSM}	2.0	Amps
Typical Junction Capacitance between Terminal (Note 1)	C_J	15	pF
Maximum Operating Temperature Range	T_J	+125	°C
Storage Temperature Range	T_{STG}	-40 to +125	°C

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

CHARACTERISTICS	SYMBOL	CH551N1PT	UNITS
Maximum Instantaneous Forward Voltage at $I_F(1)$= 100mA	$V_F(1)$	0.36	Volts
Maximum Instantaneous Forward Voltage at $I_F(2)$= 500mA	$V_F(2)$	0.47	Volts
Maximum Average Reverse Current at V_R= 20V	I_R	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

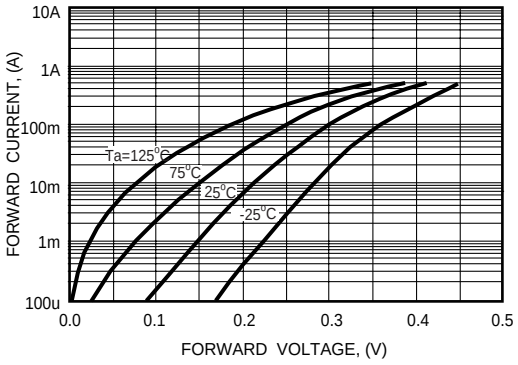


FIG. 2 - REVERSE CHARACTERISTICS

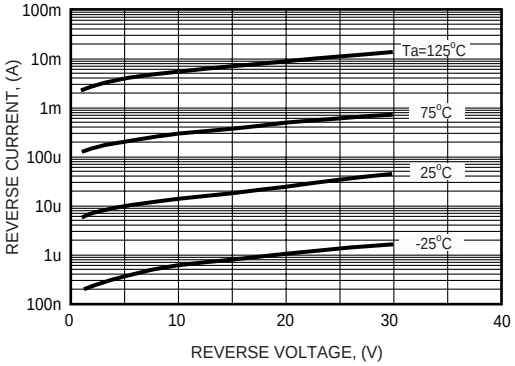


FIG. 3 - TYPICAL JUNCTION CAPACITANCE