



# CHENMKO ENTERPRISE CO.,LTD

**CH451N1PT**

## SURFACE MOUNT

SCHOTTKY BARRIER DIODE

VOLTAGE 30 Volts CURRENT 0.5 Ampere

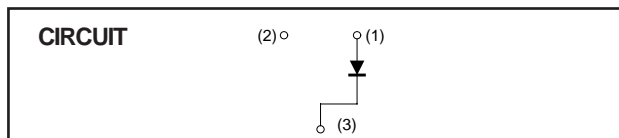
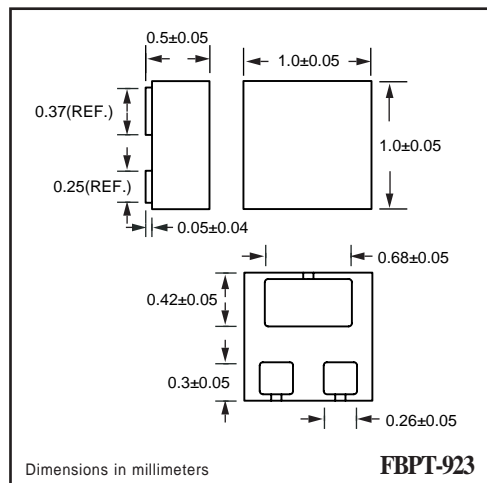
Lead free devices

**APPLICATION**  
\* Low power rectification

**FEATURE**  
\* Small surface mounting type. (FBPT-923)  
\* Ultra low IR. (VF=0.55V Typ. at 0.5A)  
\* High reliability

**CONSTRUCTION**  
\* Silicon epitaxial planar

**FBPT-923**



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

RATINGS	SYMBOL	CH451N1PT	UNITS
Maximum Recurrent Peak Reverse Voltage	VRRM	30	Volts
Maximum RMS Voltage	VRMS	21	Volts
Maximum DC Blocking Voltage	VDC	30	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	CH451N1PT	UNITS	
Maximum Instantaneous Forward Voltage	@ IF(1)= 100mA	VF(1)	0.385	Volts
	@ IF(2)= 500mA	VF(2)	0.55	Volts
Maximum Average Reverse Current at VR= 5.0V	@ TA= 25°C	IR(1)	10	uAmps
	@ TA= 45°C	IR(2)	40	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 ( CH451N1PT )

FIG. 1 - FORWARD CHARACTERISTICS

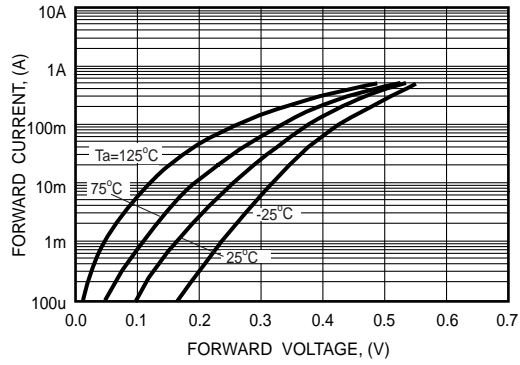


FIG. 2 - MAXIMUM REVERSE CHARACTERISTICS

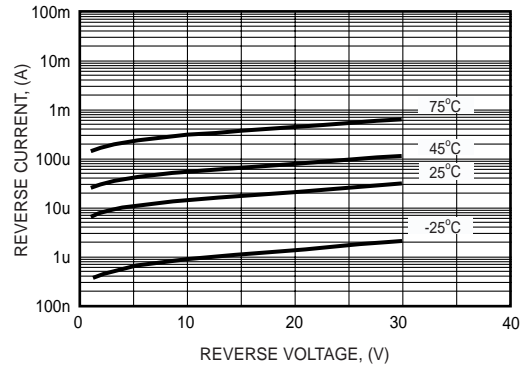


FIG. 3 - TYPICAL JUNCTION CAPACITANCE

