



CHENMKO ENTERPRISE CO.,LTD

Lead free devices

**SURFACE MOUNT
SWITCHING DIODE**

VOLTAGE 85 Volts CURRENT 0.125 Ampere

CHP203N1PT

APPLICATION

- * Ultra high speed switching

FEATURE

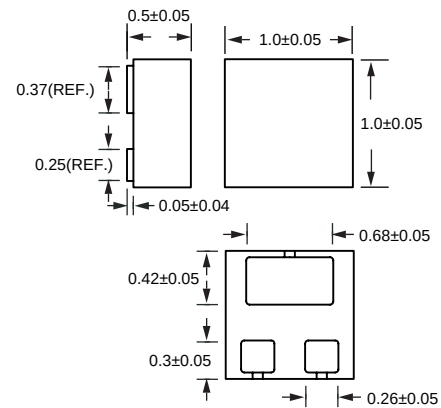
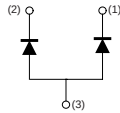
- * Small surface mounting type. (FBPT-923)
- * High speed. ($T_{RR}=1.5\text{nSec}$ Typ.)
- * Suitable for high packing density.
- * Peak forward current is 500mA.

CONSTRUCTION

- * Silicon epitaxial planar

FBPT-923

CIRCUIT



Dimensions in millimeters

FBPT-923

MAXIMUM RATINGS (At $T_A = 25^\circ\text{C}$ unless otherwise noted)

RATINGS	SYMBOL	CHP203N1PT	UNITS
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	85	Volts
Maximum RMS Voltage	V_{RMS}	56	Volts
Maximum DC Blocking Voltage	V_{DC}	80	Volts
Maximum Average Forward Rectified Current	I_o	0.125	Amps
Peak Forward Surge Current at 1uSec.	I_{FSM}	4.0	Amps
Typical Junction Capacitance between Terminal (Note 1)	C_J	1.5	pF
Maximum Reverse Recovery Time (Note 2)	T_{RR}	4.0	nSec
Maximum Operating Temperature Range	T_J	+150	$^\circ\text{C}$
Storage Temperature Range	T_{STG}	-65 to +150	$^\circ\text{C}$

ELECTRICAL CHARACTERISTICS (At $T_A = 25^\circ\text{C}$ unless otherwise noted)

CHARACTERISTICS	SYMBOL	CHP203N1PT	UNITS
Maximum Instantaneous Forward Voltage at $I_F = 100\text{mA}$	V_F	1.20	Volts
Maximum Average Reverse Current at $V_R = 80\text{V}$	I_R	0.5	μAmps

NOTES : 1. Measured at 1.0 MHz and applied reverse voltage of 0 volts.
2. Measured at applied forward current of 10mA to reverse current of 10mA; $R_L = 100\ \Omega$.
3. ESD sensitive product handling required.

2006-07

RATING CHARACTERISTIC CURVES (CHP203N1PT)

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

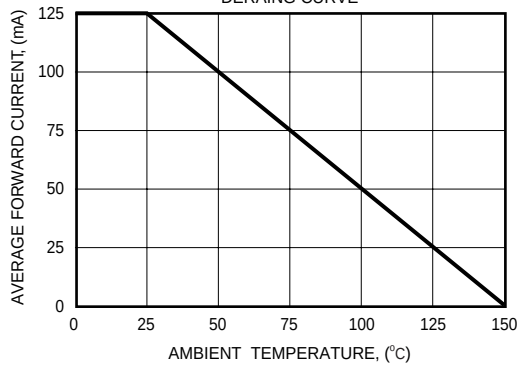


FIG. 2 - FORWARD CHARACTERISTICS

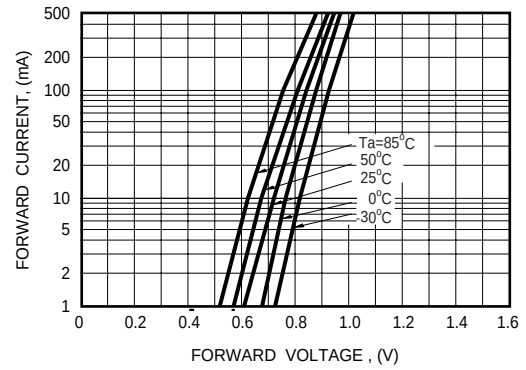


FIG. 3 - REVERSE CHARACTERISTICS

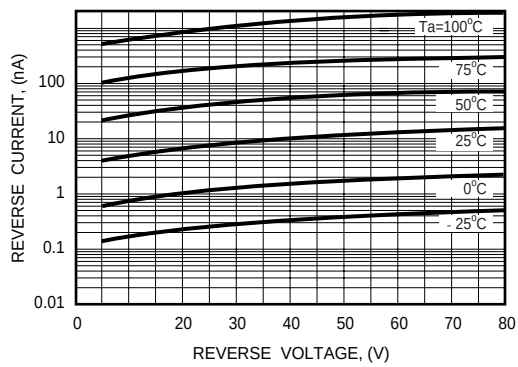


FIG. 4 - TYPICAL JUNCTION CAPACITANCE

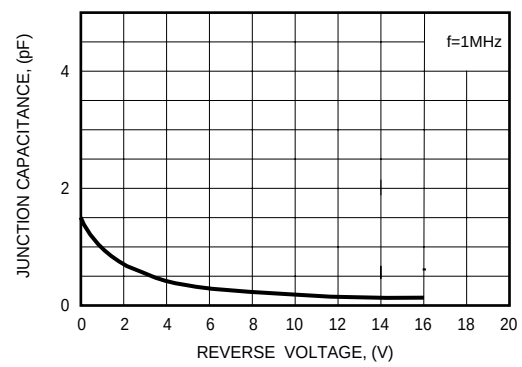


FIG. 5 - REVERSE RECOVERY TIME

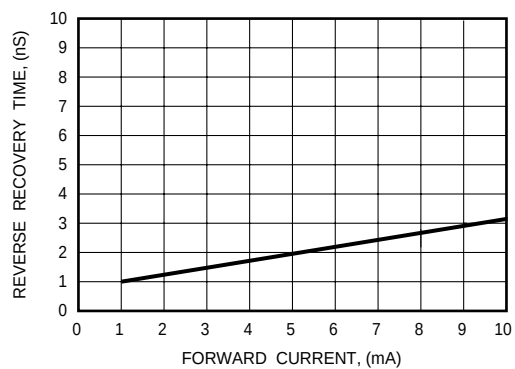


FIG. 6 - REVERSE RECOVERY TIME MEASUREMENT CIRCUIT

