



**CHENMKO ENTERPRISE CO.,LTD**

Halogens free devices

**SURFACE MOUNT  
SWITCHING DIODE**

**VOLTAGE 80 Volts CURRENT 0.1 Ampere**

**CHP222M1GP**

#### APPLICATION

- \* Ultra high speed switching

#### FEATURE

- \* Small surface mounting type. (FBPT-723)
- \* High speed. (TRR=1.5nSec Typ.)
- \* Suitable for high packing density.
- \* Maximum total power dissipation is 150mW.
- \* Peak forward current is 300mA.

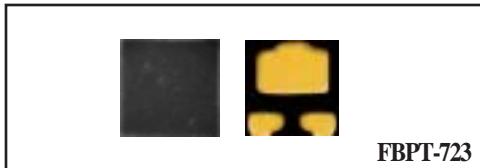
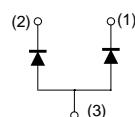
#### CONSTRUCTION

- \* Silicon epitaxial planar

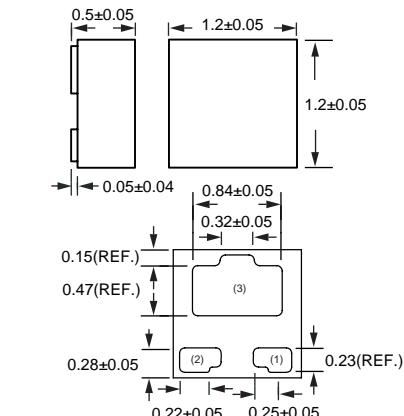
#### marking

- \* 21

#### CIRCUIT



**FBPT-723**



Dimensions in millimeters

**FBPT-723**

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

RATINGS	SYMBOL	CHP222M1GP	UNITS
Maximum Recurrent Peak Reverse Voltage	VR <sub>RM</sub>	80	Volts
Maximum RMS Voltage	V <sub>RMS</sub>	56	Volts
Maximum DC Blocking Voltage	V <sub>D</sub> C	80	Volts
Maximum Average Forward Rectified Current	I <sub>O</sub>	0.1	Amps
Peak Forward Surge Current at 1uSec.	I <sub>FSM</sub>	4.0	Amps
Typical Junction Capacitance between Terminal (Note 1)	C <sub>J</sub>	3.5	pF
Maximum Reverse Recovery Time (Note 2)	T <sub>RR</sub>	4.0	nSec
Maximum Operating Temperature Range	T <sub>J</sub>	+150	°C
Storage Temperature Range	T <sub>STG</sub>	-55 to +150	°C

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

CHARACTERISTICS	SYMBOL	CHP222M1GP	UNITS
Maximum Instantaneous Forward Voltage at I <sub>F</sub> = 100mA	V <sub>F</sub>	1.20	Volts
Maximum Average Reverse Current at V <sub>R</sub> = 70V	I <sub>R</sub>	0.1	uAmps

NOTES : 1. Measured at 1.0 MHz and applied reverse voltage of 6.0 volts.  
 2. Measured at applied forward current of 5mA and reverse voltage of 6.0 volts.  
 3. ESD sensitive product handling required.

2004-6

## RATING CHARACTERISTIC CURVES ( CHP222M1GP )

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

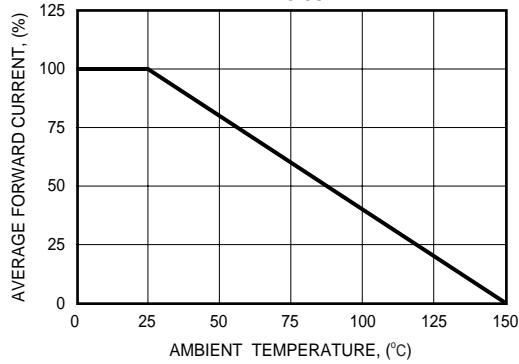


FIG. 2 - FORWARD CHARACTERISTICS

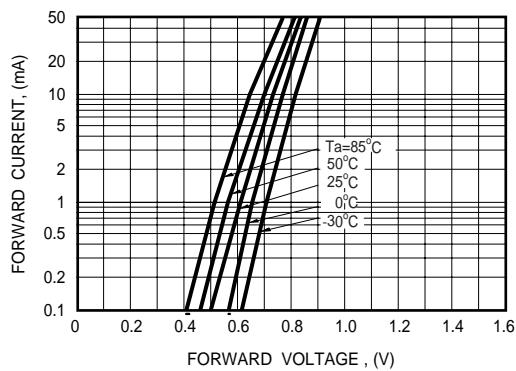


FIG. 3 - REVERSE CHARACTERISTICS

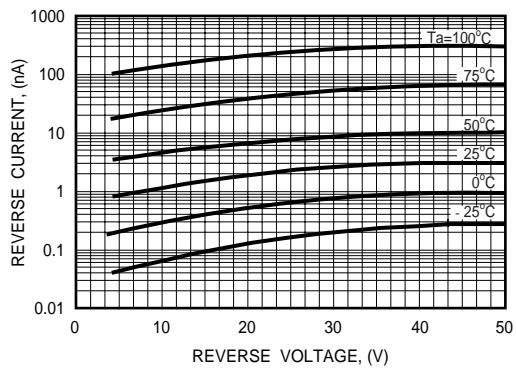


FIG. 4 - TYPICAL JUNCTION CAPACITANCE

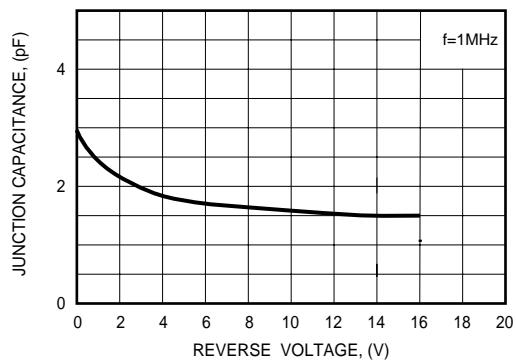


FIG. 5 - REVERSE RECOVERY TIME

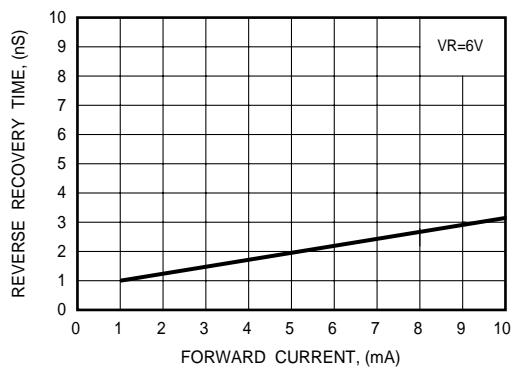


FIG. 6 - REVERSE RECOVERY TIME MEASUREMENT CIRCUIT

