



# CHENMKO ENTERPRISE CO.,LTD

Halogens free devices

## SURFACE MOUNT SWITCHING DIODE

VOLTAGE 85 Volts CURRENT 0.125 Ampere

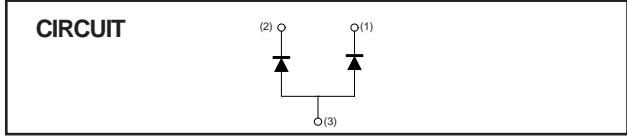
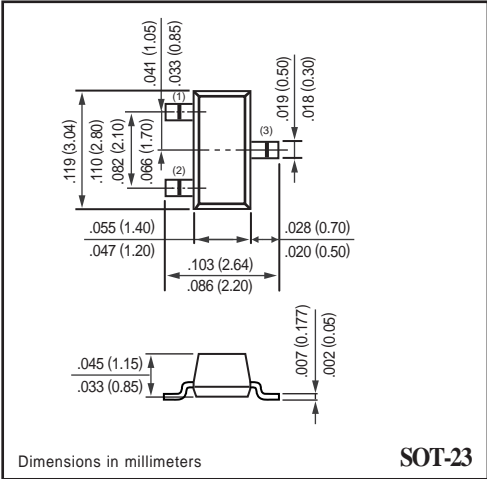
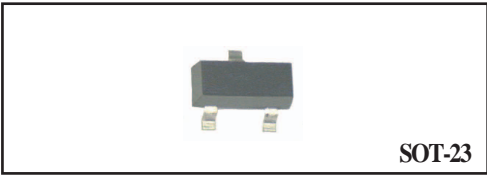
**CHP203KGP**

**APPLICATION**  
\* Ultra high speed switching

**FEATURE**  
\* Small surface mounting type. (SOT-23)  
\* High speed. (TRR=1.5nSec Typ.)  
\* Suitable for high packing density.  
\* Maximum total power dissipation is 250mW.  
\* Peak forward current is 500mA.

**CONSTRUCTION**  
\* Silicon epitaxial planar

**MARKING**  
\* E6



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

RATINGS	SYMBOL	CHP203KGP	UNITS
Maximum Recurrent Peak Reverse Voltage	VRRM	85	Volts
Maximum RMS Voltage	VRMS	56	Volts
Maximum DC Blocking Voltage	VDC	80	Volts
Maximum Average Forward Rectified Current	Io	0.125	Amps
Peak Forward Surge Current at 1uSec.	IFSM	4.0	Amps
Typical Junction Capacitance between Terminal (Note 1)	CJ	1.5	pF
Maximum Reverse Recovery Time (Note 2)	TRR	4.0	nSec
Maximum Operating Temperature Range	TJ	+150	°C
Storage Temperature Range	TSTG	-65 to +150	°C

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

CHARACTERISTICS	SYMBOL	CHP203KGP	UNITS
Maximum Instantaneous Forward Voltage at If= 100mA	VF	1.20	Volts
Maximum Average Reverse Current at VR= 80V	IR	0.5	uAmps

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; RL=100 Ohms.  
3. ESD sensitive product handling required.

## RATING CHARACTERISTIC CURVES ( CHP203KGP )

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

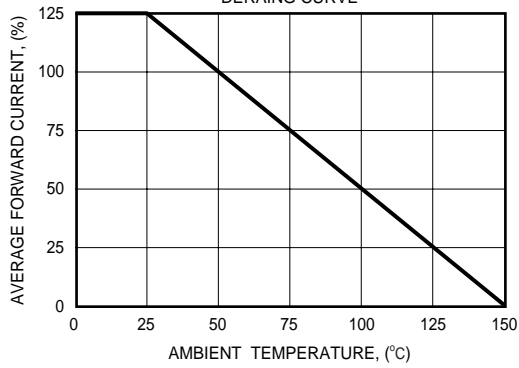


FIG. 2 - FORWARD CHARACTERISTICS

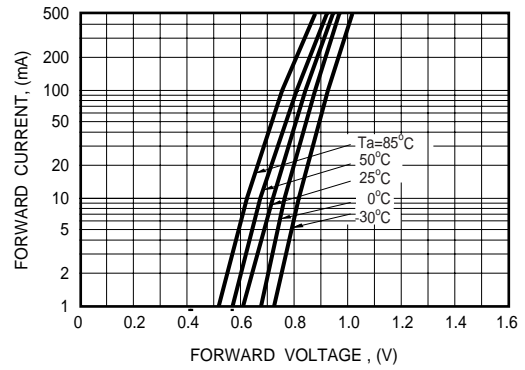


FIG. 3 - REVERSE CHARACTERISTICS

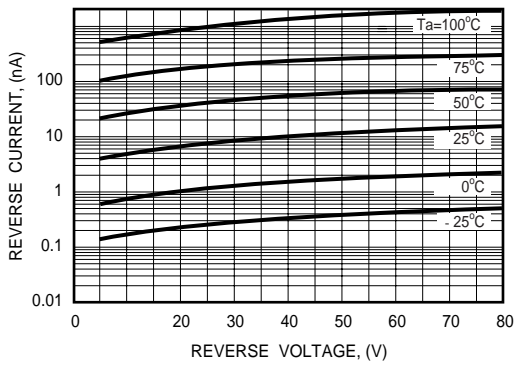


FIG. 4 - TYPICAL JUNCTION CAPACITANCE

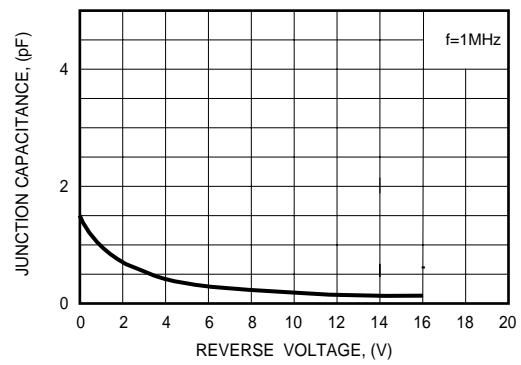


FIG. 5 - REVERSE RECOVERY TIME

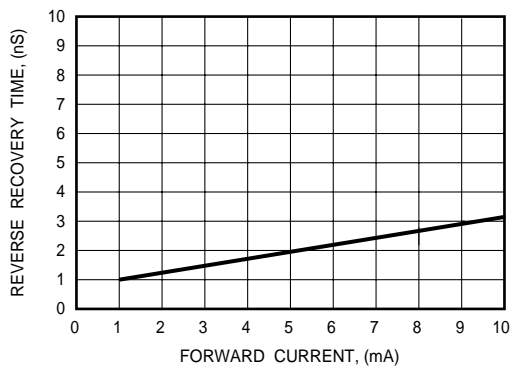


FIG. 6 - REVERSE RECOVERY TIME MEASUREMENT CIRCUIT

