



CHENMKO ENTERPRISE CO.,LTD

**SURFACE MOUNT
SWITCHING DIODE**

VOLTAGE 350 Volts CURRENT 225 mAmpere

CHBD3004HGP

Halogens free devices

APPLICATION

* Ultra high speed switching

FEATURE

- * Small surface mounting type. (SC-76/SOD-323)
- * High speed. (TRR=50 nSec Typ.)
- * Suitable for high packing density.
- * Maximum total power dissipation is 200mW.
- * Peak forward current is 500mA.
- * High voltage capability.

CONSTRUCTION

* Silicon epitaxial planar

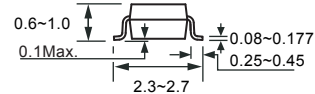
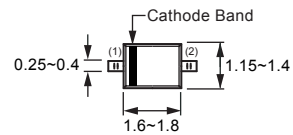
MARKING

* VC

CIRCUIT



SC-76/SOD-323



Dimensions in millimeters

SC-76/SOD-323

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

RATINGS		SYMBOL	CHBD3004HGP	UNITS
Maximum Recurrent Peak Reverse Voltage		VRRM	350	Volts
Maximum RMS Voltage		VRMS	212	Volts
Maximum DC Blocking Voltage		VDC	300	Volts
Maximum Average Forward Rectified Current		IO	225	mAmps
Peak Forward Surge Current	@TP= 1uSec	IFSM	4.0	Amps
	@TP= 1Sec		1.0	
Typical Junction Capacitance between Terminal (Note 1)		CJ	5.0	pF
Maximum Reverse Recovery Time (Note 2)		TRR	50	nSec
Typical Thermal Resistance		RθJA	625	°C/W
Operation and Storage Temperature Range		TJ,TSTG	-65 to +150	°C

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

CHARACTERISTICS		SYMBOL	CHBD3004HGP	UNITS
Reverse Breakdown Voltage at IR= 150uA		BVR	350 Min.	Volts
Maximum Instantaneous Forward Voltage at IF= 100mA		VF	1.0	Volts
Maximum Average Reverse Current at VR= 240V	@TA= 25°C	IR	100	nAmps
	@TA= 150°C		100	uAmps

NOTES : 1. Measured at 1.0 MHz and applied reverse voltage of 0 volts.
 2. Measured at applied forward current of 30mA ,reverse current of 30mA ,RL=100 Ω and recovery to IRR=-3mA.
 3. ESD sensitive product handling required.

2008-04

RATING CHARACTERISTIC CURVES (CHBD3004HGP)

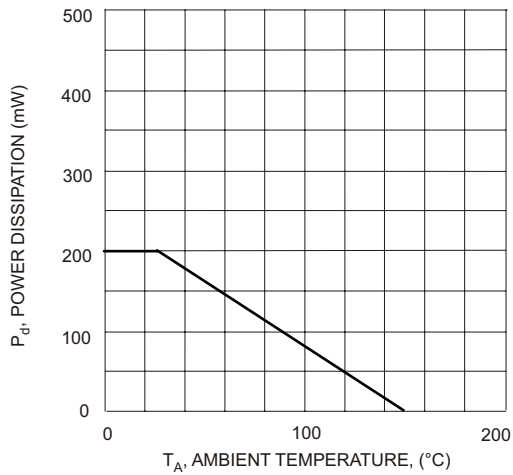


Fig. 1 Power Derating Curve, total package

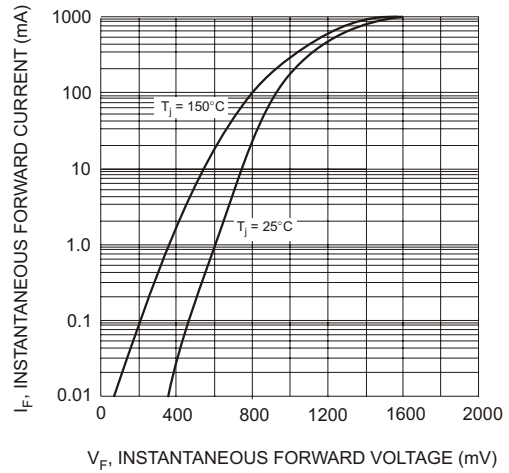


Fig. 2 Typical Forward Characteristics, per element

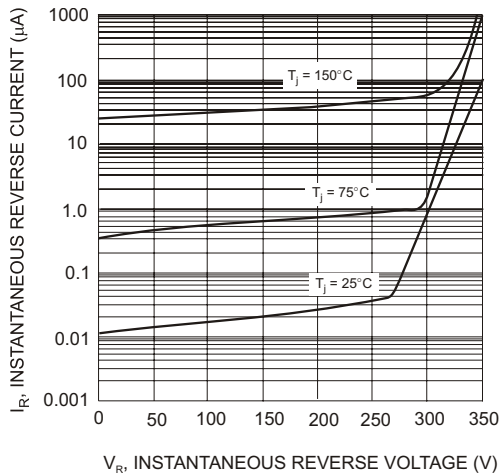


Fig. 3 Typical Reverse Characteristics, per element

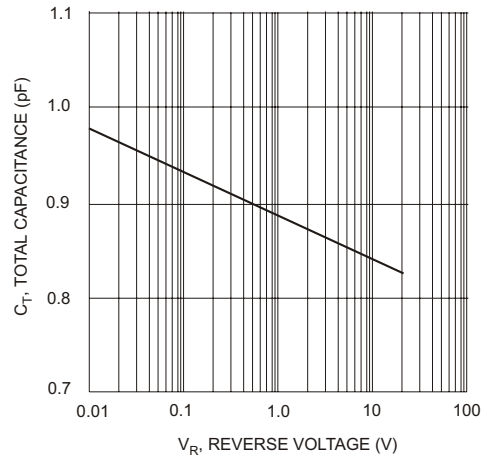


Fig. 4 Typical Total Capacitance vs. Reverse Voltage, per element