



CHENMKO ENTERPRISE CO.,LTD

Halogens free devices

SURFACE MOUNT

SCHOTTKY BARRIER RECTIFIER

VOLTAGE RANGE 40 - 60 Volts CURRENT 15 mAmperes

CH140BGP

THRU

CH160BGP

APPLICATION

* Ultra high speed switching

FEATURE

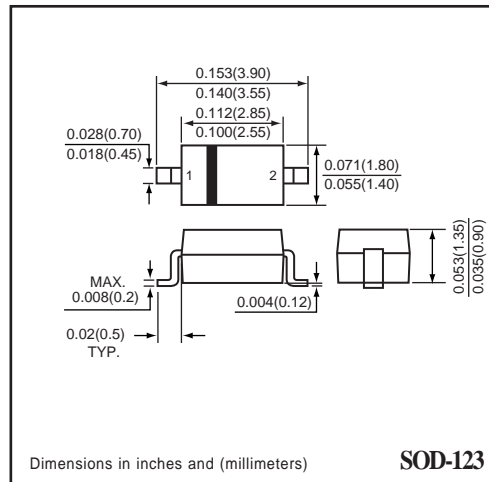
* Small surface mounting type. (SOD-123)
 * High speed. (T_{RR}=1.0nSec Typ.)
 * Maximum total power dissipation is 400mW.

CONSTRUCTION

* Silicon epitaxial planar



SOD-123



Dimensions in inches and (millimeters)

SOD-123

CIRCUIT



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

RATINGS	SYMBOL	CH140BGP	CH150BGP	CH160BGP	UNITS
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	40	50	60	Volts
Maximum RMS Voltage	V _{RMS}	28	35	42	Volts
Maximum DC Blocking Voltage	V _{DC}	40	50	60	Volts
Forward Continuous Current	I _{FM}	15			mAmps
Peak Forward Surge Current 10 uS single half sine-wave superimposed on rated load (JEDEC method)	I _{FSM}	2.0			Amps
Typical Thermal Resistance (Note 1)	R _{θJA}	300			°C / W
Total Capacitance (Note 2)	C _T	2.2	2.1	2.0	pF
Reverse Recovery Time at I _F =I _R =5.0mA , I _{rr} =0.5mA	T _{rr}	1.0			nS
Operating Temperature Range	T _J	-55 to +125			°C
Storage Temperature Range	T _{STG}	-55 to +125			°C

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

CHARACTERISTICS	SYMBOL	CH140BGP	CH150BGP	CH160BGP	UNITS
Maximum Instantaneous Forward Voltage	@ I _F = 1.0mA	390	400	410	mVolts
	@ I _F = 15mA	900	950	1000	mVolts
Maximum Average Reverse Current at Rated DC Blocking Voltage	I _R	200	200	200	nAmps

NOTES : 1. Thermal Resistance (Junction to Lead) : PC Board Mounted on 0.2 X 0.2" (5 X 5mm) copper pad area.
 2. Measured at 1.0 MHz and applied reverse voltage of 0 volts.

RATING CHARACTERISTIC CURVES (CH140BGP THRU CH160BGP)

FIG. 1 - FORWARD CHARACTERISTICS

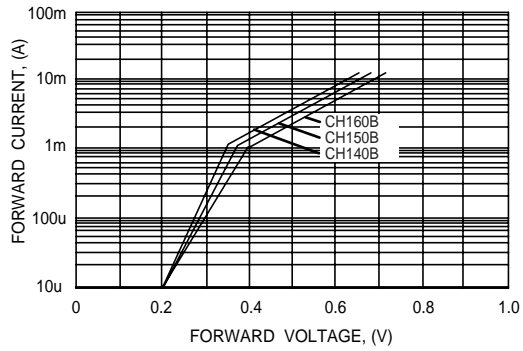


FIG. 2 - TOTAL CAPACITANCE V.S REVERSE VOLTAGE

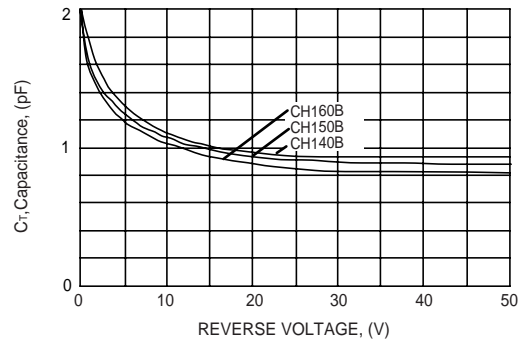


FIG. 3 - REVERSE CHARACTERISTICS

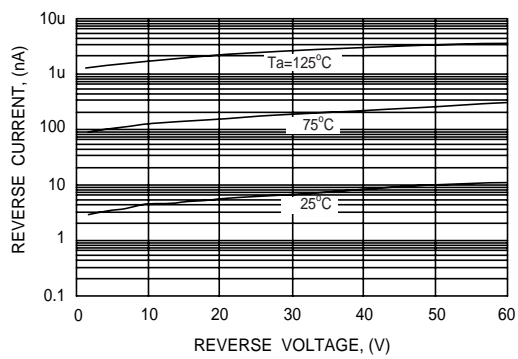


FIG. 4 - TYPICAL POWER DERATING CURVE

