



# CHENMKO ENTERPRISE CO.,LTD

Halogens free devices

## SURFACE MOUNT

### SCHOTTKY BARRIER DIODE

VOLTAGE 70 Volts CURRENT 15 mAmpere

**CH157BGP**

#### APPLICATION

\* For general purpose switching application

#### FEATURE

- \* Small surface mounting type. (SOD-123)
- \* Fast switch Time. (TRR=1.0nSec Typ.)
- \* Low Forward Voltage Drop.
- \* Lead free devices

#### CONSTRUCTION

\* Silicon epitaxial planar

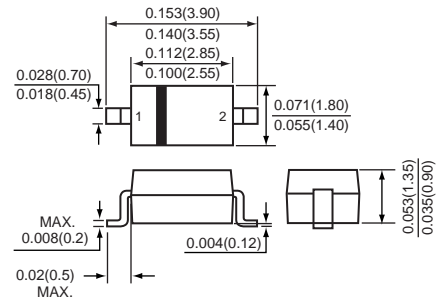
#### MARKING

\* BA1



**SOD-123**

#### CIRCUIT



Dimensions in inches and (millimeters)

**SOD-123**

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

RATINGS	SYMBOL	CH157BGP	UNITS
Maximum Recurrent Peak Reverse Voltage	VRRM	70	Volts
Maximum RMS Voltage	VRMS	49	Volts
Maximum DC Blocking Voltage	VDC	70	Volts
Forward Continuous Current	IO	15	mAmps
Non-Repetitive Peak Forward Surge Current @t=1.0uSec	IFSM	2.0	Amps
Typical Junction Capacitance between Terminal (Note 1)	CJ	2.0	pF
Power Dissipation	Pd	330	mW
Thermal Resistance Junction to Ambient (Note 3)	RθJA	300	°C/W
Maximum Operating Temperature Range	TJ	-65 to +125	°C
Maximum Storage Temperature Range	TSTG	-65 to +150	°C

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

CHARACTERISTICS	SYMBOL	CH157BGP	UNITS
Reverse Breakdown Voltage at IR=10uA	VBR	70	Volts
Maximum Instantaneous Forward Voltage at IF=15mA	VF	1.0	Volts
Maximum Average Reverse Current at VR=50V	IR	200	nAmps
Maximum Reverse Recovery Time (Note 2)	TRR	1.0	nSec

- NOTES :
1. Measured at 1.0 MHz and applied reverse voltage of 0 volts.
  2. Measured at applied forward current of 5mA and reverse current of 5mA.
  3. Device mounted on FR-4 by 1 inch X 0.85 inch X 0.062 inch
  4. ESD sensitive product handling required.

2004-06

## RATING CHARACTERISTIC CURVES ( CH157BGP )

FIG. 1 - TYPICAL POWER DERATING CURVE

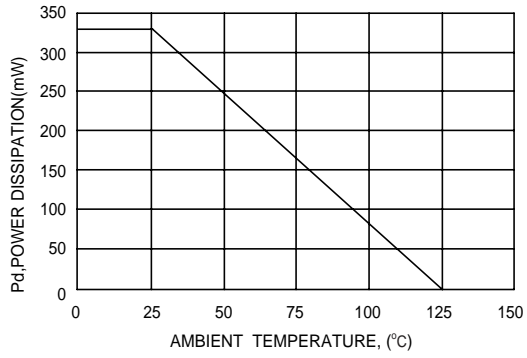


FIG. 2 - FORWARD CHARACTERISTICS

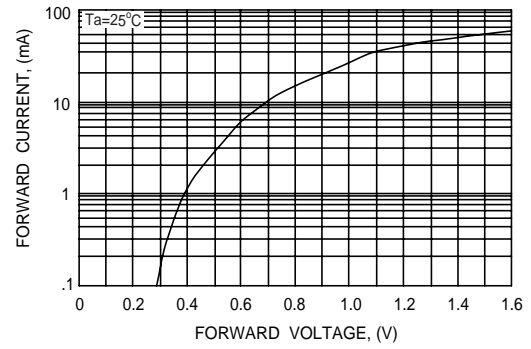


FIG. 3 - REVERSE CHARACTERISTICS

