



# CHENMKO ENTERPRISE CO.,LTD

Halogens free devices

## SURFACE MOUNT

### SCHOTTKY BARRIER DIODE

VOLTAGE 10 Volts CURRENT 3 Ampere

CH331H-10GP

#### APPLICATION

- \* Low power rectification
- \* For power supply
- \* For detection and step-up-conversion

#### FEATURE

- \* Small surface mounting type. (SC-76/SOD-323)
- \* Low IR. (IR=10uA Typ.)
- \* High reliability
- \* High current rectifier Schottky diode with low Vf drop
- \* Total power dissipation, Ptot= 1350 mW @TS = 28 °C.

#### CONSTRUCTION

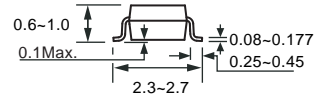
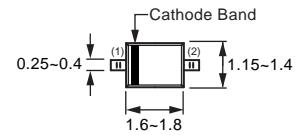
- \* Silicon epitaxial planar

#### MARKING

- \* JK



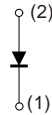
SC-76/SOD-323



Dimensions in millimeters

SC-76/SOD-323

#### CIRCUIT



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

RATINGS	SYMBOL	CH331H-10GP			UNITS
		MIN.	TYP.	MAX.	
Maximum Recurrent Peak Reverse Voltage	VRRM	-	-	10	Volts
Maximum RMS Voltage	VRMS	-	-	7	Volts
Maximum DC Blocking Voltage	VDC	-	-	10	Volts
Maximum Average Forward Rectified Current	IO	-	-	3.0	Amps
Peak Forward Surge Current at 8.3 mSec single half sine-wave	IFSM	-	-	5	Amps
Typical Junction Capacitance between Terminal (Note 1)	CJ	12	25	30	pF
Maximum Operating Temperature Range	TJ	-	-	+150	°C
Storage Temperature Range	TSTG	- 55	-	+150	°C

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

CHARACTERISTICS	SYMBOL	CH331H-10GP			UNITS
		MIN.	TYP.	MAX.	
Maximum Instantaneous Forward Voltage at IF= 10mA IF= 100mA IF= 500mA IF= 1000mA	VF	0.2	0.24	0.3	Volts
		0.26	0.32	0.38	
		0.32	0.4	0.5	
		0.36	0.48	0.6	
Maximum Average Reverse Current at VR= 5V @TA = 25°C VR= 8V @TA = 25°C	IR	-	40	50	uAmps
		-	75	100	

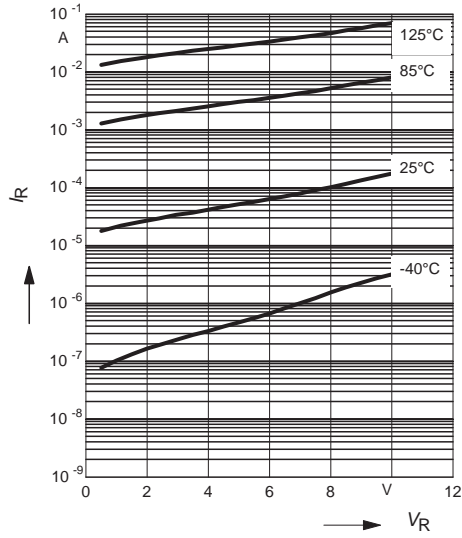
NOTES : 1. Measured at 1.0 MHz and applied reverse voltage of 5.0 volts.  
2. ESD sensitive product handling required.

2002-11

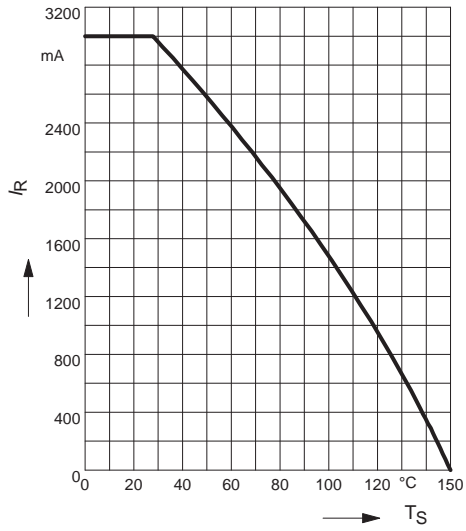
## RATING CHARACTERISTIC CURVES ( CH331H-10GP )

**Reverse current  $I_R = f(V_R)$**

$T_A = \text{Parameter}$

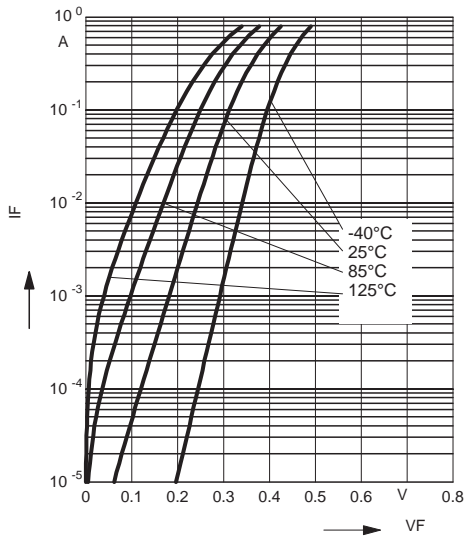


**Forward current  $I_F = f(T_S)$**



**Forward current  $I_F = f(V_F)$**

$T_A = \text{Parameter}$



**Permissible Pulse Load**

$I_{Fmax}/I_{FDC} = f(t_p)$

