CHENMKO ENTERPRISE CO.,LTD

CH331H-10PT

SURFACE MOUNT
SCHOTTKY BARRIER DIODE
VOLTAGE 10 Volts CURRENT 3 Ampere

Lead free devices

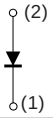
APPLICATION
* Low power rectification
* For power supply
* For detection and step-up-conversion

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

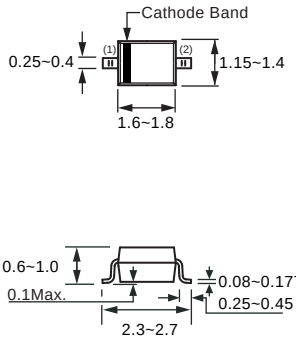
CONSTRUCTION
* Silicon epitaxial planar

MARKING
* JK

CIRCUIT



SC-76/SOD-323



Dimensions in millimeters

SC-76/SOD-323

MAXIMUM RATINGES (At T_A = 25^{o}C unless otherwise noted)

RATINGS	SYMBOL	CH331H-10PT			UNITS
		MIN.	TYP.	MAX.	
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	-	-	10	Volts
Maximum RMS Voltage	V_{RMS}	-	-	7	Volts
Maximum DC Blocking Voltage	V_{DC}	-	-	10	Volts
Maximum Average Forward Rectified Current	I_O	-	-	3.0	Amps
Peak Forward Surge Current at 8.3 mSec single half sine-wave	I_{FSM}	-	-	5	Amps
Typical Junction Capacitance between Terminal (Note 1)	C_J	12	25	30	pF
Maximum Operating Temperature Range	T_J	-	-	+150	^{o}C
Storage Temperature Range	T_{STG}	- 55	-	+150	^{o}C

ELECTRICAL CHARACTERISTICS (At T_A = 25^{o}C unless otherwise noted)

CHARACTERISTICS	SYMBOL	CH331H-10PT			UNITS
		MIN.	TYP.	MAX.	
Maximum Instantaneous Forward Voltage at I_F= 10mA	V_F	0.2	0.24	0.3	Volts
I_F= 100mA		0.26	0.32	0.38	
I_F= 500mA		0.32	0.4	0.5	
I_F= 1000mA		0.36	0.48	0.6	
Maximum Average Reverse Current at V_R= 5V @T_A = 25^{o}C	I_R	-	40	50	uAmps
V_R= 8V @T_A = 25^{o}C		-	75	100	

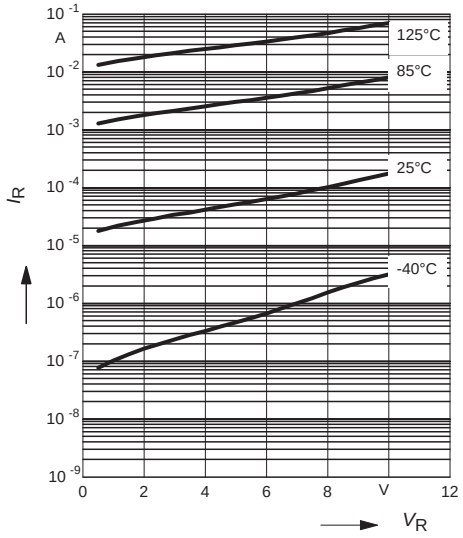
NOTES : 1. Measured at 1.0 MHz and applied reverse voltage of 5.0 volts.
2. ESD sensitive product handling required.

2002-11

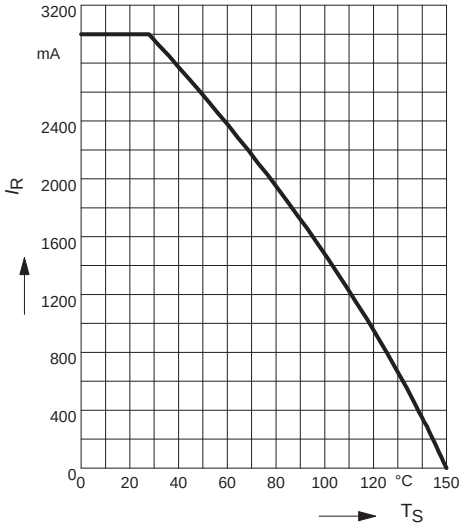
RATING CHARACTERISTIC CURVES (CH331H-10PT)

Reverse current $I_R = f(V_R)$

T_A = Parameter

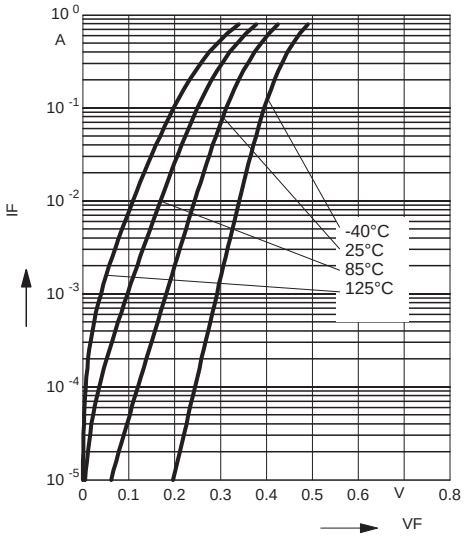


Forward current $I_F = f(T_S)$



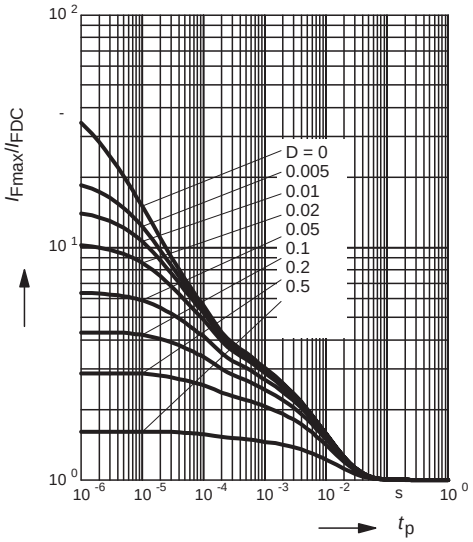
Forward current $I_F = f(V_F)$

T_A = Parameter



Permissible Pulse Load

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



RATING CHARACTERISTIC CURVES (CH331H-10PT)

Permissible Puls Load $R_{thJS} = f(t_p)$