ADE-208-397(Z)

1SS165
Silicon Schottky Barrier Diode for CATV Balanced Mixer

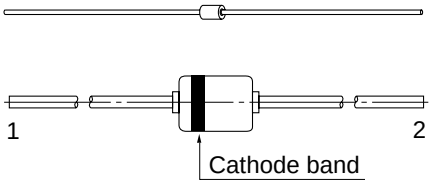
HITACHI

Rev. 0
Oct. 1995

Features

- Low capacitance.(C=1.0pF max)
- Small glass package (MHD) enables easy mounting and high reliability.

Outline



1. Cathode
2. Anode

Ordering Information

TType No.	Cathode band	Package Code
1SS165	Green	MHD

Absolute Maximum Ratings (Ta = 25°C)

Item	Symbol	Value	Unit
Reverse voltage	V_R	10	V
Average forward current	I_o	15	mA
Peak forward current	I_{FM}	35	mA
Power dissipation	P_d	150	mW
Junction temperature	T_j	100	°C
Storage temperature	T_{stg}	-55 to +100	°C

Electrical Characteristics (Ta = 25°C)

Item	Symbol	Min	Typ	Max	Unit	Test Condition
Forward voltage	V_{F1}	365	—	435	mV	I_F = 1 mA
	V_{F2}	520	—	600		I_F = 10 mA
Reverse current	I_{R1}	—	—	0.2	μA	V_R= 2 V
	I_{R2}	—	—	10		V_R= 10 V
Capacitance	C	—	—	1.0	pF	V_R = 0 V, f = 1 MHz
Capacitance deviation	ΔC	—	—	0.1	pF	V_R = 0 V, f = 1 MHz
Forward voltage deviation	ΔV_{F1}	—	—	10	mV	I_F = 2.5 mA
	ΔV_{F2}	—	—	10		I_F = 10 mA
ESD-Capability	—	30	—	—	V	*C=200pF , Both forward and reverse direction 1 pulse.

* Failure criterion ; $I_R \geq 50\mu A$
** Each group shall unify a multiple of 4 diodes

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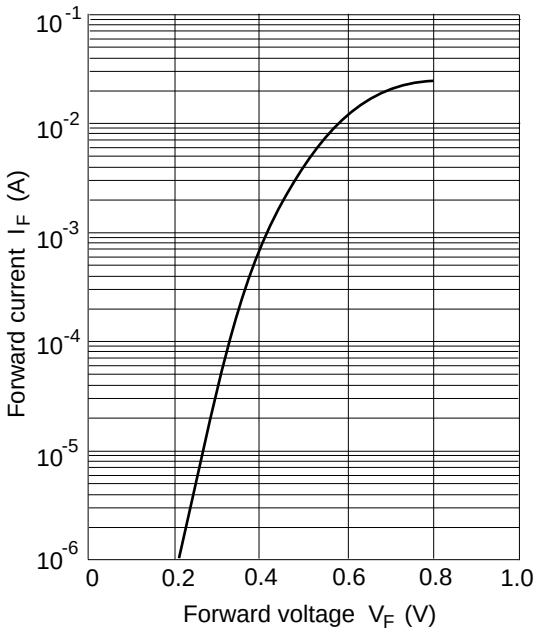


Fig.1 Forward current Vs. Forward voltage

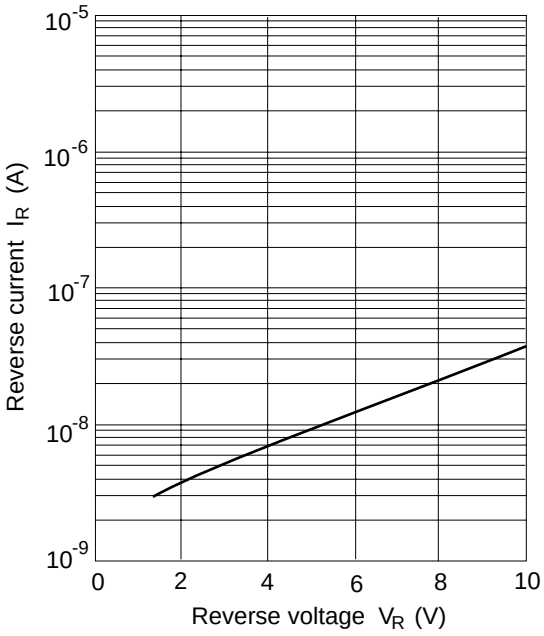


Fig.2 Reverse current Vs. Reverse voltage

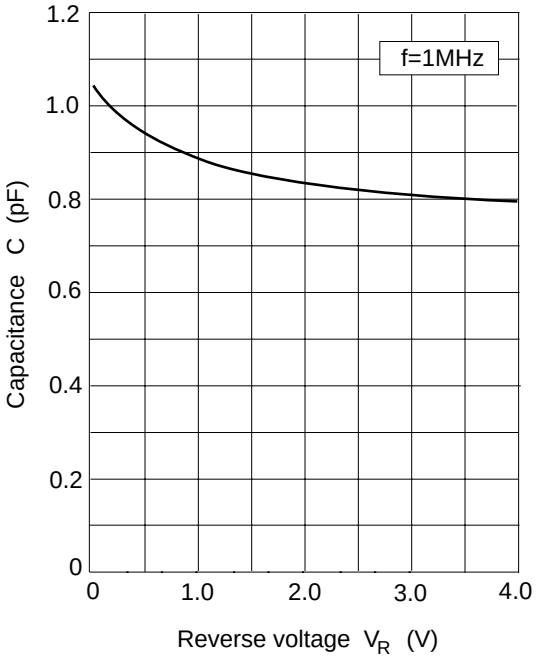
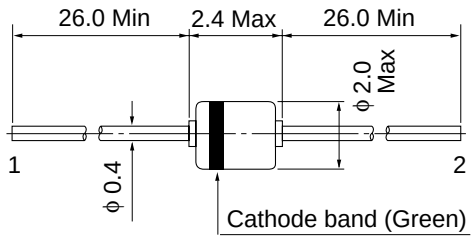


Fig.3 Capacitance Vs. Reverse voltage

Package Dimensions

Unit: mm



1 Cathode
2 Anode

HITACHI Code	MHD
JEDEC Code	DO-34
EIAJ Code	—
Weight (g)	0.084