1SS165

Silicon Schottky Barrier Diode for CATV Balanced Mixer

HITACHI

ADE-208-397 (Z)
Rev. 0

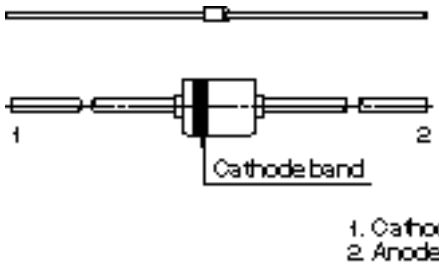
Features

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

Ordering Information

Type No.	Cathode band	Package Code
1SS165	Green	MHD

Outline



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	Pd	150	mW
Junction temperature	Tj	100	°C
Storage temperature	Tstg	–55 to +100	°C

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Electrical Characteristics (Ta = 25°C)

Item	Symbol	Min	Typ	Max	Unit	Test Condition
Forward voltage	V_{F1}	365	—	430	mV	I_F = 1mA
	V_{F2}	520	—	600		I_F = 10mA
Reverse current	I_{R1}	—	—	0.2	µA	V_R = 2V
	I_{R2}	—	—	10		V_R = 10V
Capacitance	C	—	—	1.0	pF	V_R = 0V, f = 1MHz
Capacitance deviation	ΔC	—	—	0.1	pF	V_R = 0V, f = 1MHz
Forward voltage deviation	ΔV_{F1}	—	—	10	mV	I_F = 2.5mA
	ΔV_{F2}	—	—	10		I_F = 10mA
ESD-Capability	—	30	—	—	V	*[1]C = 200pF, Both forward and reverse direction 1 pulse.

Notes: 1. Failure criterion; $I_R \geq 50\mu A$
2. Each group shall unify a multiple of 4 diodes

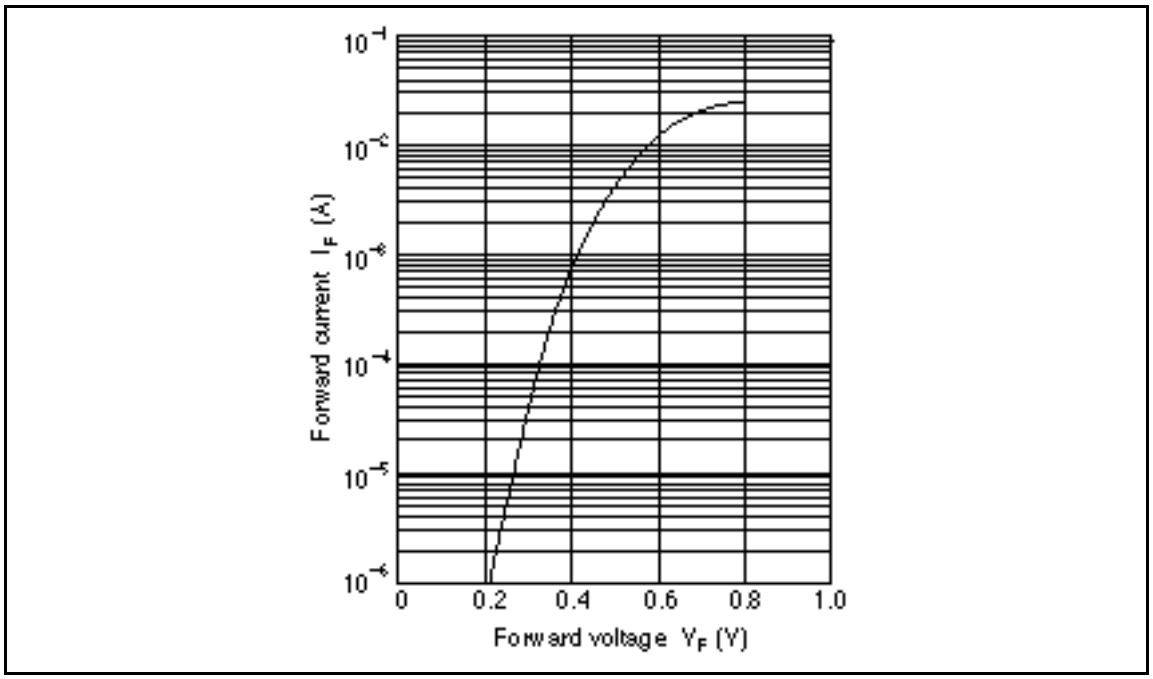


Fig.1 Forward current Vs. Forward voltage

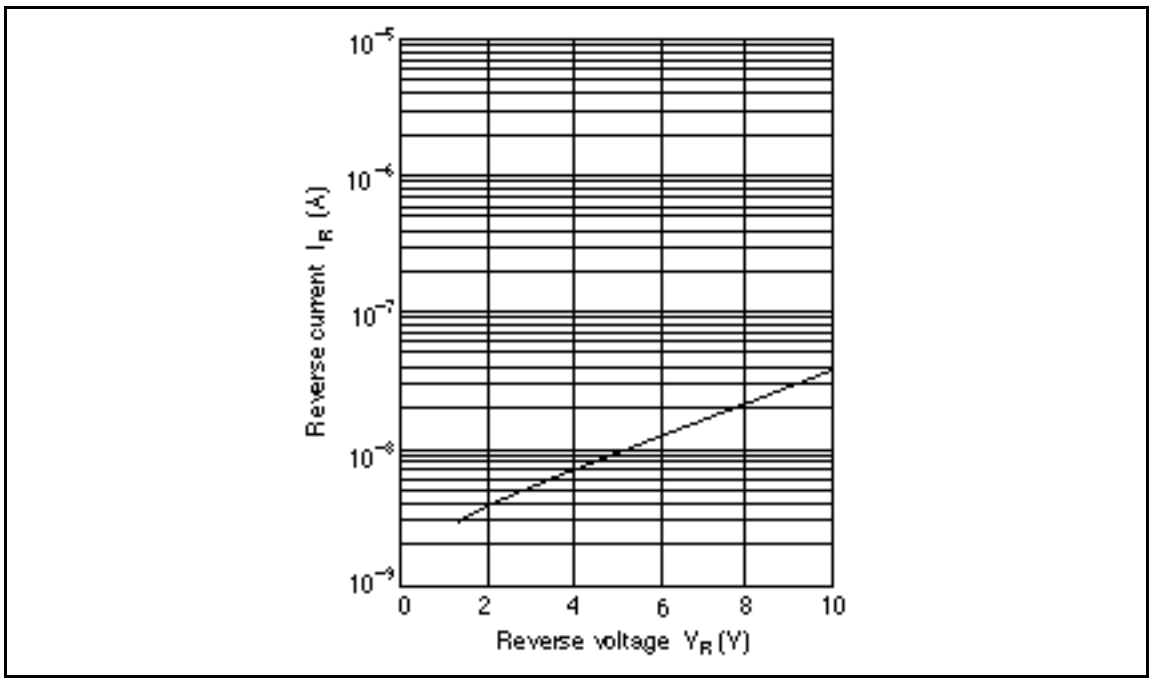


Fig.2 Reverse current Vs. Reverse voltage

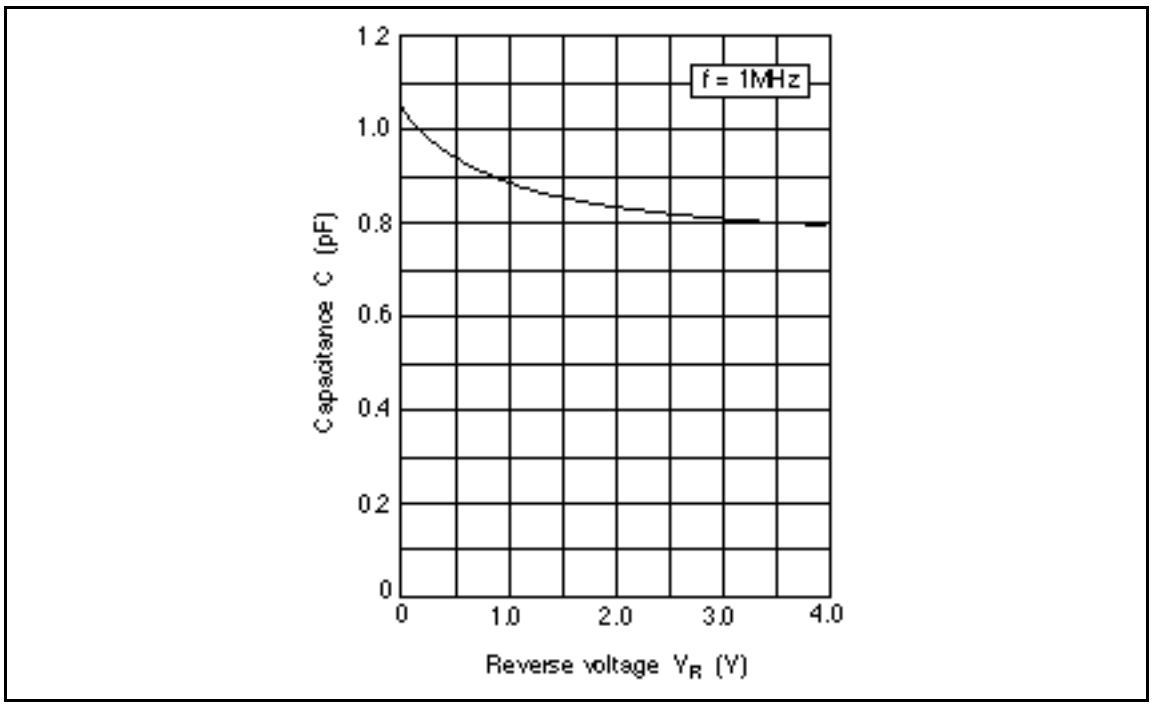
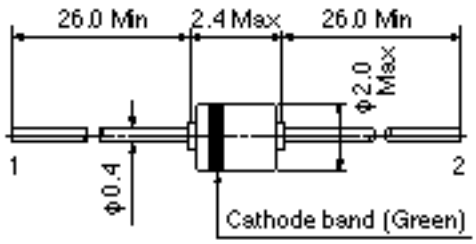


Fig.3 Capacitance Vs. Reverse voltage

Package Dimensions

Unit: mm



1 Cathode
2 Anode

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