

1SS270

Silicon Epitaxial Planar Diode for High Speed Switching

REJ03G0566-0400

Rev.4.00

Sep 29, 2008

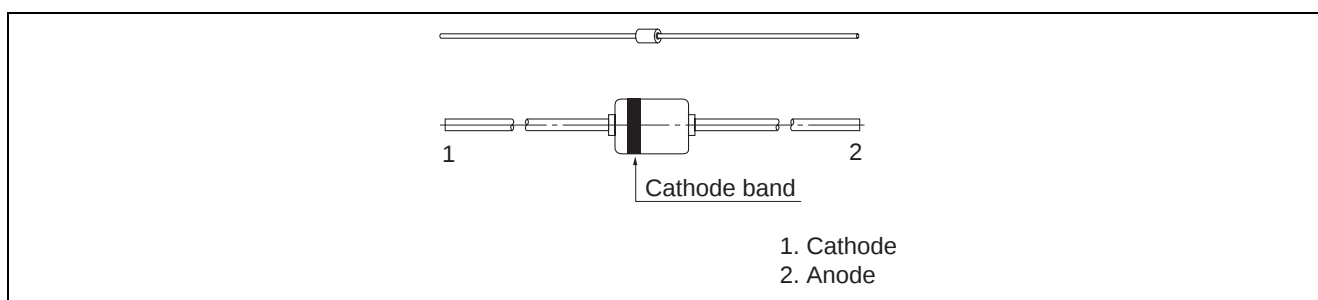
Features

- Low capacitance. ($C = 3.0 \text{ pF max}$)
- Short reverse recovery time. ($t_{rr} = 3.5 \text{ ns max}$)
- Small glass package (MHD) enables easy mounting and high reliability.

Ordering Information

Part No.	Cathode Band	Package Name	Package Code
1SS270	Light Blue	MHD	GRZZ0002ZC-A

Pin Arrangement



Absolute Maximum Ratings

(Ta = 25°C)

Item	Symbol	Value	Unit
Peak reverse voltage	V_{RM}	35	V
Reverse voltage	V_R	30	V
Average rectified current	I_O	150	mA
Peak forward current	I_{FM}	450	mA
Non-Repetitive peak forward surge current	I_{FSM}^*	1	A
Power dissipation	P_d	250	mW
Junction temperature	T_j	175	°C
Storage temperature	T_{stg}	-65 to +175	°C

Note: Within 1s forward surge current.

Electrical Characteristics

(Ta = 25°C)

Item	Symbol	Min	Typ	Max	Unit	Test Condition
Forward voltage	V_F	—	—	0.8	V	$I_F = 10\text{ mA}$
Reverse current	I_R	—	—	1.0	μA	$V_R = 30\text{ V}$
Capacitance	C	—	—	3.0	pF	$V_R = 1\text{ V}$, $f = 1\text{ MHz}$
Reverse recovery time	t_{rr}	—	—	3.5	ns	$I_F = 10\text{ mA}$, $V_R = 6\text{ V}$, $R_L = 50\ \Omega$

Main Characteristic

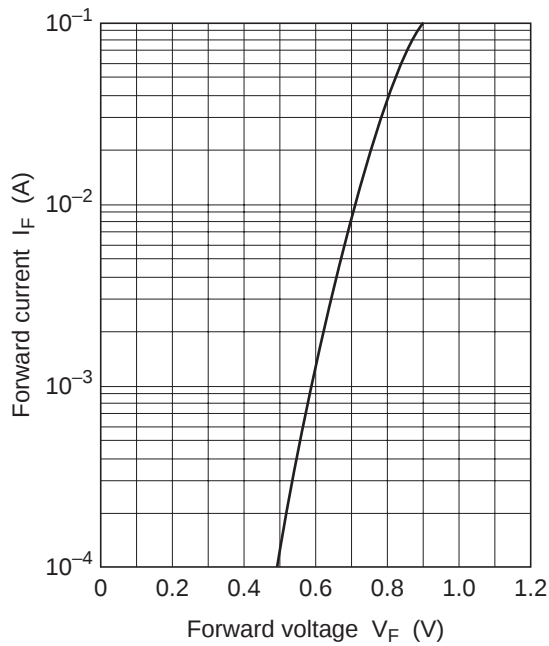


Fig.1 Forward current vs. Forward voltage

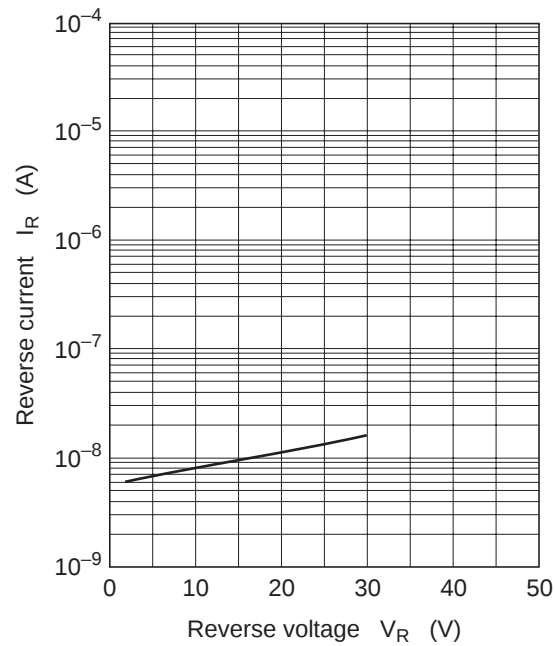


Fig.2 Reverse current vs. Reverse voltage

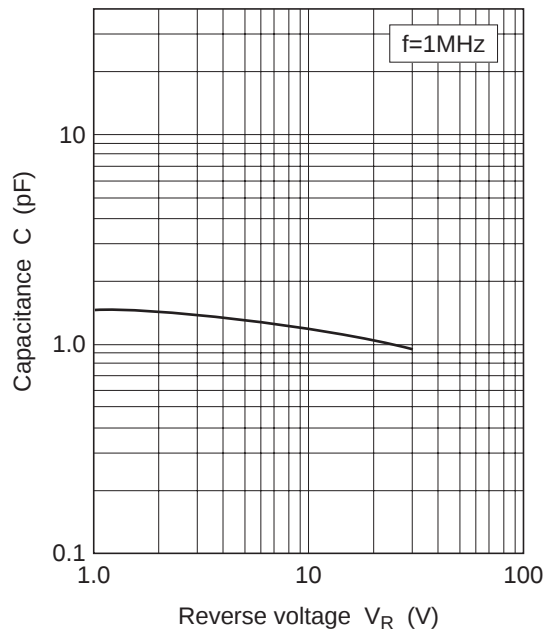
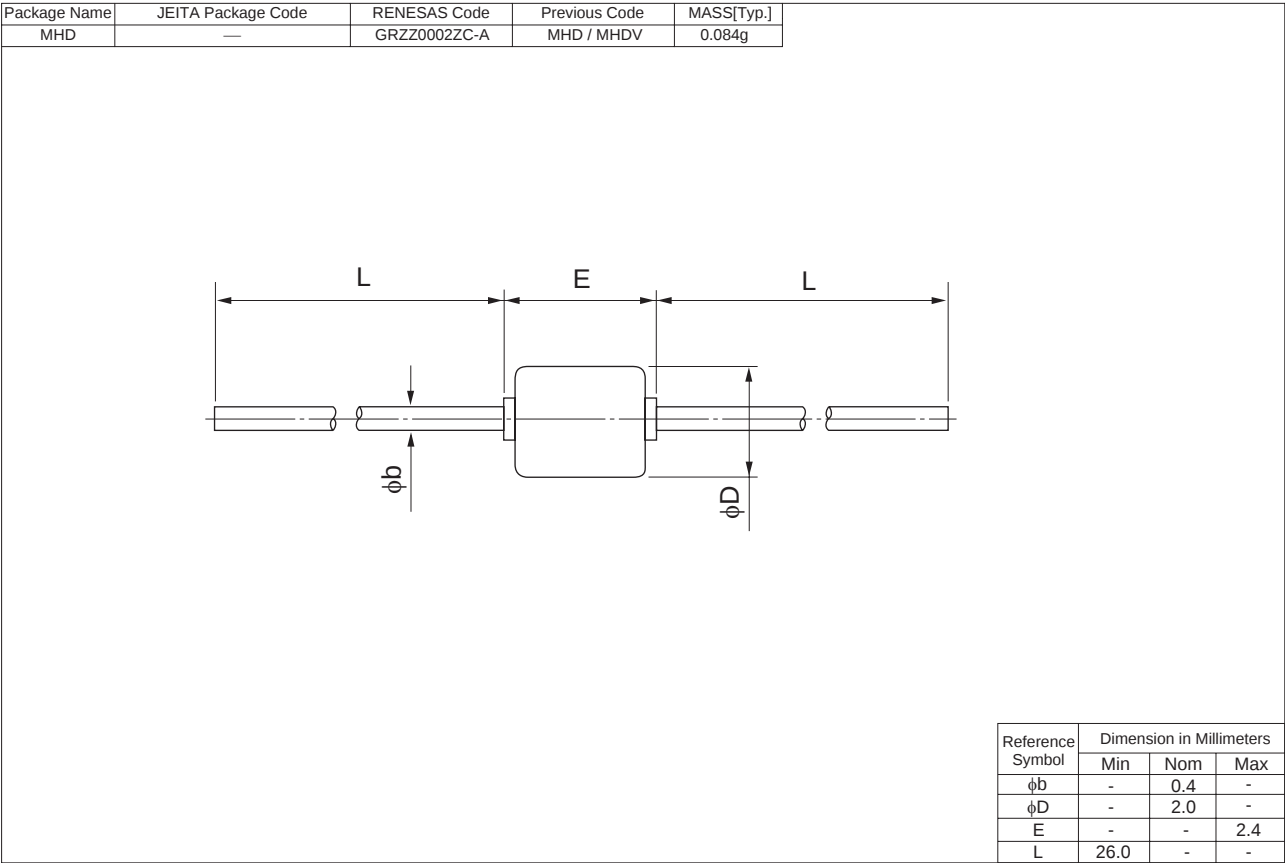


Fig.3 Capacitance vs. Reverse voltage

Package Dimensions



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