GSDBAS16JZF

Switching Diode

Product Description

The switching diode with 100V 215mA.

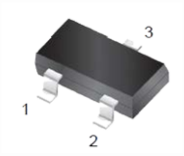
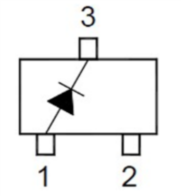
Features

- High switching speed trr ≤ 4 ns
- Repetitive peak reverse voltage: V_{RRM} ≤ 100 V

Mechanical Data

- SOT-23. Package
- RoHS Compliant and Halogen Free

Package and Pin Assignment

SOT-23		Equivalent Circuit	
		 * Pin 2 is Not Connected.	
Pin	**Description**	**Pin**	**Description**
1	Anode	3	Cathode

Ordering and Marking Information

GS P/N	Package	Marking	Quantity / Reel
GSDBAS16JZF	SOT-23	5D	3,000PCS

GSDBAS16JZF

- **Product Code:**
  GSDBAS16
- **Package Code:**
  JZ for SOD-323
- **Green Level:**
  F for RoHS Compliant and Halogen Free

Marking Information		
5D	- **Product Code:** 5D	

Absolute Maximum Ratings (T_A=25°C unless otherwise specified)

Symbol	Parameter		Value	Unit
V_{RRM}	Repetitive Peak Reverse Voltage		100	V
V_R	Reverse Voltage		80	V
$I_{F(AV)}$	Continuous Forward Current		215	mA
I_{FSM}	Non-Repetitive Peak Forward Surge Current	t=1µs	4	A
		t=1ms	1	
		t=1s	0.5	
I_{FRM}	Repetitive Peak Forward Current		0.5	A
P_D	Power Dissipation		350	mW
$R_{\theta JA}$	Thermal Resistance from Junction to Ambient [1]		357	°C/W
T_J	Junction Temperature		150	°C
T_{STG}	Storage Temperature Range		-55 to +150	°C

NOTE:
Device mounted on FR-4 PCB with minimum recommended pad layout.

Electrical Characteristics (T_A=25°C unless otherwise specified)

Symbol	Parameter	Conditions	Min	Typ	Max	Unit
V_F	Forward Voltage	I_F=1mA			0.715	V
		I_F=10mA			0.855	
		I_F=50mA			1.000	
		I_F=150mA			1.250	
I_R	Reverse Current	V_R=25V			0.03	µA
		V_R=80V			0.5	
		V_R=25V, T_J=150°C			30	
		V_R=80V, T_J=150°C			50	
Cd	Diode Capacitance	V_R=0V, f=1MHz			2	pF
trr	Reveres Recovery Time	I_F=10mA, V_R=6V, R_L=100Ω			4	ns

Typical Characteristics (T_A=25℃ unless otherwise specified)

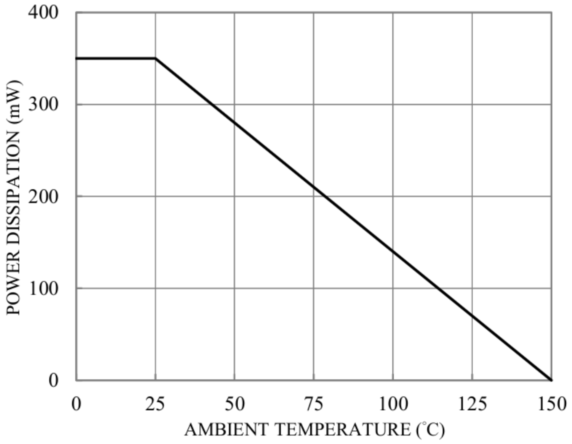


Fig.1-POWER DERATING CURVE

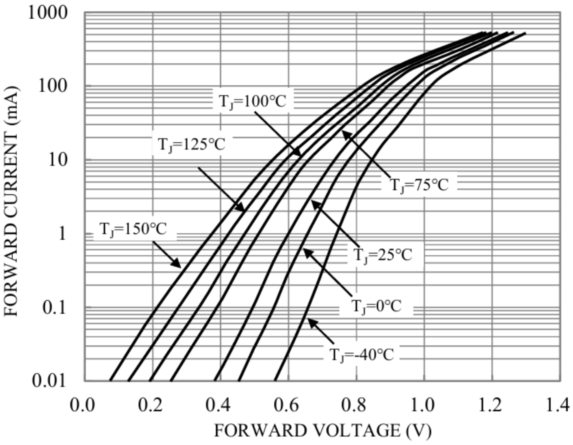


Fig.2-TYPICAL FORWARD CHARACTERISTICS

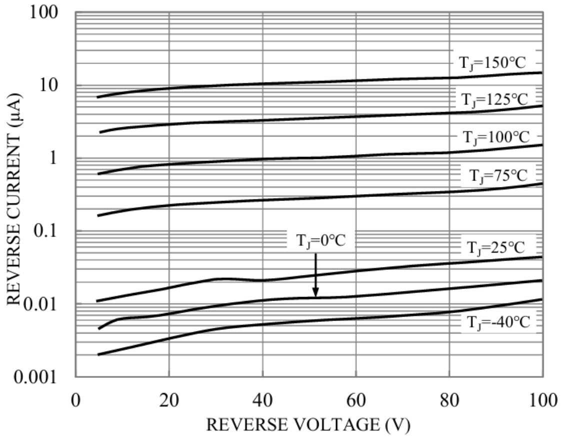


Fig.3-TYPICAL REVERSE CHARACTERISTICS

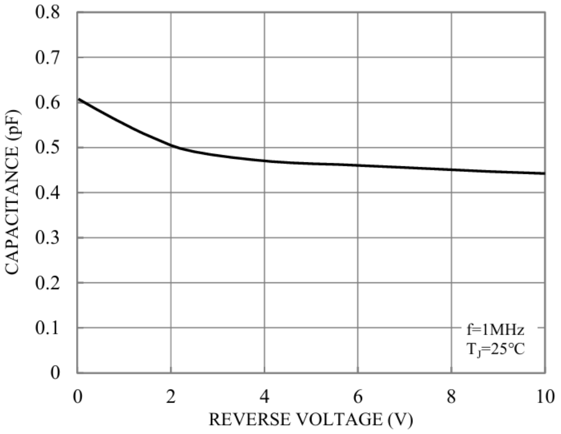
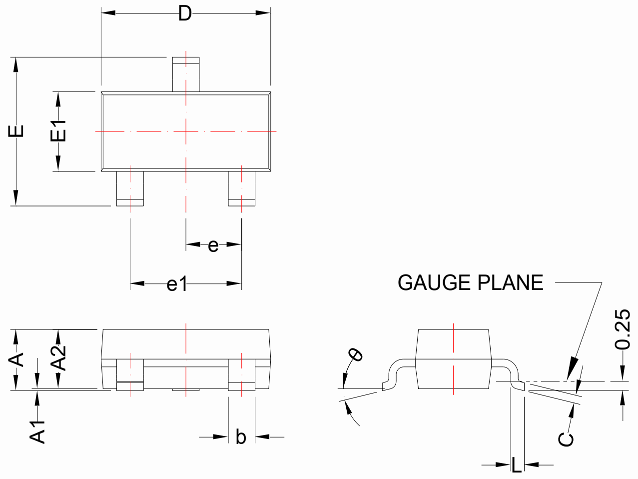


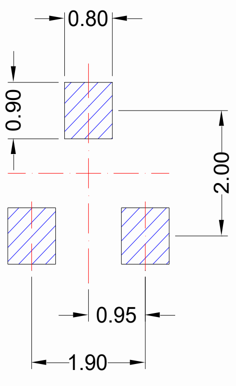
Fig.4-CAPACITANCE

SOT-23

Package Dimension



Recommended Land Pattern



Unit:mm

Dimensions

SYMBOL	Millimeters		Inches	
	MIN	MAX	MIN	MAX
A	0.75	1.20	0.030	0.047
A1	0.00	0.15	0.000	0.006
A2	0.70	1.10	0.028	0.043
b	0.30	0.60	0.012	0.024
c	0.08	0.20	0.003	0.008
D	2.80	3.04	0.110	0.120
E	2.10	2.64	0.083	0.104
E1	1.20	1.40	0.047	0.055
e	0.95 BSC		0.037 BSC	
e1	1.90 BSC		0.075 BSC	
L	0.2	0.6	0.008	0.024
θ	0°	8°	0°	8°

NOTE:

Dimensions are exclusive of Burrs, Mold Flash & Tie Bar extrusions.

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