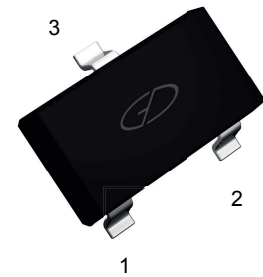
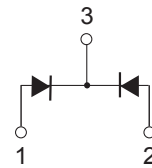


Features

- Epoxy meets UL 94 V-0 flammability rating
- Small outline surface mount package
- Low current leakage
- For high-speed switching applications



SOT-323



Schematic Diagram

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

Parameter	Symbol	Value	Units
Reverse Voltage	V _R	100	V
Forward Current	I _F	150	mA
Non-Repetitive Peak Forward Surge Current @ t=8.3ms	I _{FSM}	2.0	A
Power Dissipation	P _D	200	mW
Thermal Resistance from Junction to Ambient	R _{θJA}	625	°C/W
Junction Temperature	T _J	150	°C
Storage Temperature	T _{STG}	-55 to +150	°C

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

Parameter	Symbol	Test Conditions	Min	Typ	Max	Units
Reverse Breakdown Voltage	V _{BR}	I _R =100uA	100	-	-	V
Reverse Voltage Leakage Current	I _R	V _R =75V	-	-	2.5	uA
		V _R =20V	-	-	25	nA
Forward Voltage	V _F	I _F =1mA	-	-	715	mV
		I _F =10mA	-	-	855	
		I _F =50mA	-	-	1000	
		I _F =150mA	-	-	1250	
Diode Capacitance	C _D	V _R =0V, F=1MHZ	-	-	2	pF
Reverse Recovery Time	t _{rr}	I _F =I _R =10mA, I _{tr} =0.1×I _R , R _L =100Ω	-	-	4	nS

Typical Characteristic Curves

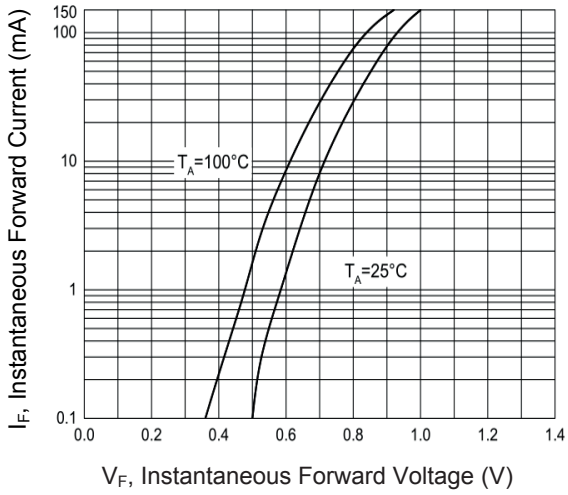


Figure 1. Typical Instantaneous Forward Characteristics

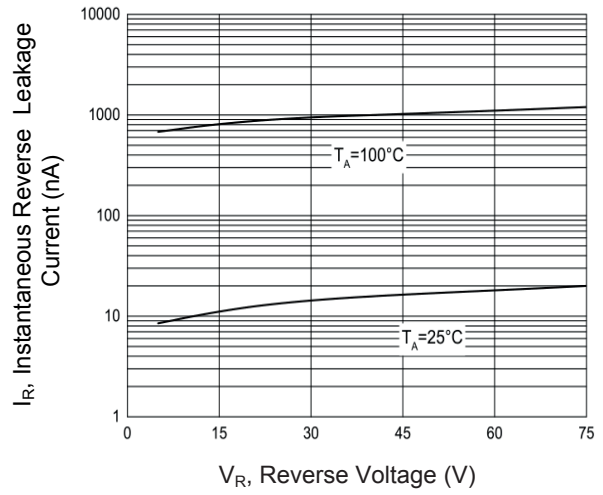


Figure 2. Typical Reverse Leakage Characteristics

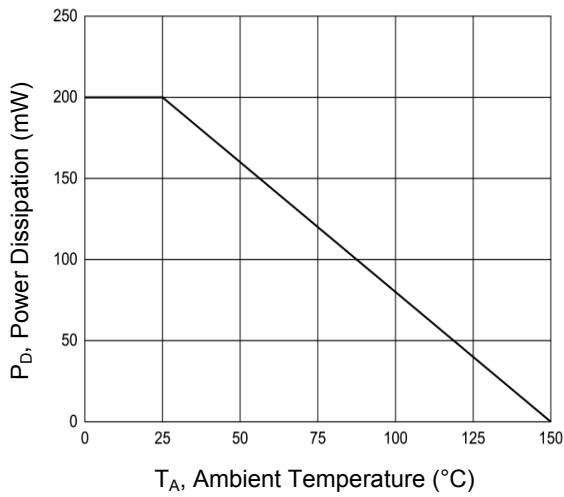
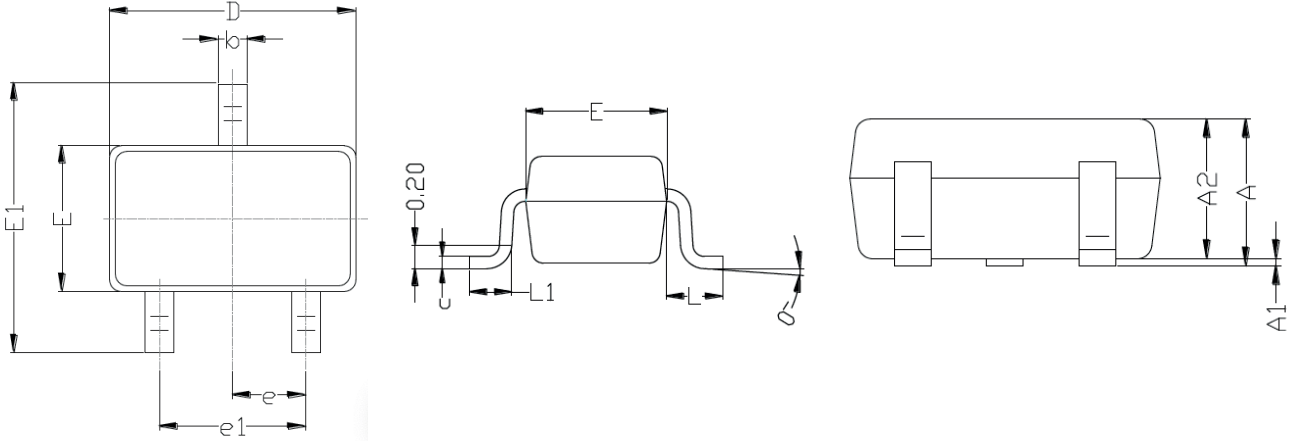


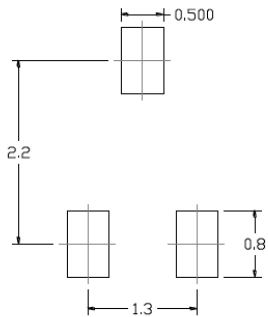
Figure 3. Power Derating Curve

Package Outline Dimensions (SOT-323)



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A	0.90	1.00	0.035	0.039
A1	0.00	0.10	0.000	0.004
A2	0.90	1.00	0.035	0.039
b	0.20	0.40	0.008	0.016
c	0.08	0.15	0.003	0.006
D	2.00	2.20	0.079	0.087
E	1.15	1.35	0.045	0.053
E1	2.15	2.45	0.085	0.096
e	0.650 TYP		0.026 TYP	
e1	1.20	1.40	0.047	0.055
L	0.525 REF		0.021 REF	
L1	0.26	0.46	0.010	0.018
θ	0°	8°	0°	8°

Recommended Pad Layout



Note:

1. Controlling dimension: in millimeters
2. General tolerance: $\pm 0.05\text{mm}$
3. The pad layout is for reference purposes only

Order Information

Device	Package	Marking	Carrier	Quantity
GSBAV70W	SOT-323	KJA	Tape & Reel	3,000 pcs / 7" Reel