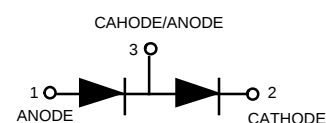
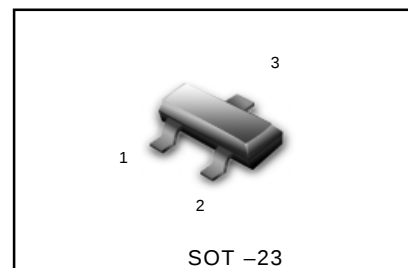


HIGH VOLTAGE SURFACE MOUNT SWITCHING DIODE

FEATURE

- Fast Switching Speed
- High Conductance
- High Reverse Breakdown Voltage Rating
- We declare that the material of product compliance with RoHS requirements.
- S- Prefix for Automotive and Other Applications Requiring Unique Site and Control Change Requirements; AEC-Q101 Qualified and PPAP Capable.



Maximum Ratings @ T_A=25°C unless otherwise specified

Characteristic	Symbol	Value	Unit
Repetitive Peak Reverse Voltage	V _{RRM}	350	V
Working Peak Reverse Voltage	V _{RWM}	300	V
DC Blocking Voltage	V _R		
RMS Reverse Voltage	V _R (RMS)	212	V
Forward Continuous Current(Note 2)	I _F	225	mA
Peak Repetitive Forward Current(Note 2)	I _{FRM}	625	mA
Non-Repetitive Peak Forward Surge Current @t=1.0μs	I _{FSM}	4.0	A
@t=1.0s		1.0	
Power Dissipation(Note 2)	P _d	350	mW
Thermal Resistance Junction to Ambient Air(Note 2)	R _{θJA}	357	°C/W
Operating and Storage Temperature Range	T _j , T _{STG}	-65 to +150	°C

Electrical Characteristics @ T_A=25°C unless otherwise specified, per element

Characteristic	Symbol	Min	Typ	MAX	Unit	Test Condition
Reverse Breakdown Voltage(Note 1)	V _{(BR)R}	350			V	I _R =100μA
Forward Voltage(Note 1)	V _F		0.78 0.93 1.03	0.87 1.0 1.25	V	I _F =20mA I _F =100mA I _F =200mA
Reverse Current(Note 1)	I _R		30 35	100 100	nA μA	V _R =240V V _R =240V, T _j =150°C
Total Capacitance	C _T		1.0	5.0	Pf	V _R =0V, f=1.0MHZ
Reverse Recovery Time	T _{rr}			50	ns	I _F =I _R =30mA I _{rr} =3.0mA, R _L =100Ω

- Notes: 1. Short duration test pulse used to minimize self-heating effect.
2. Part mounted on FR-4 board with recommended pad layout.

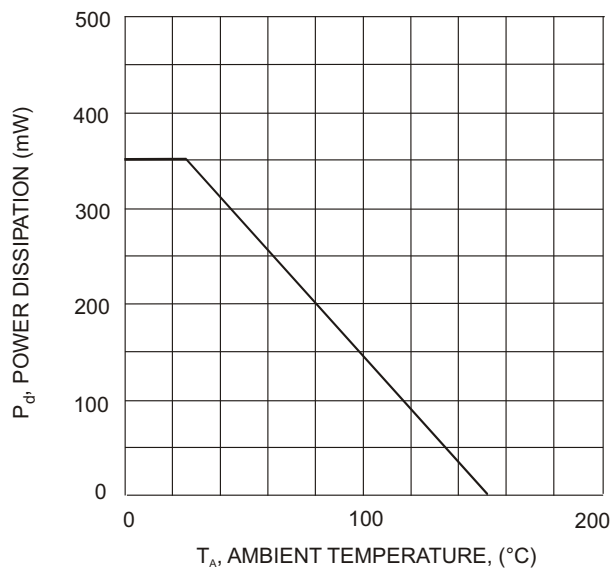


Fig. 1 Power Derating Curve, total package

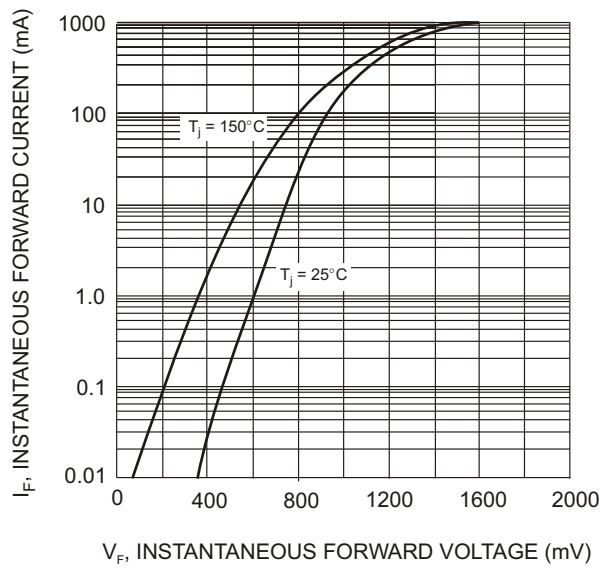


Fig. 2 Typical Forward Characteristics, per element

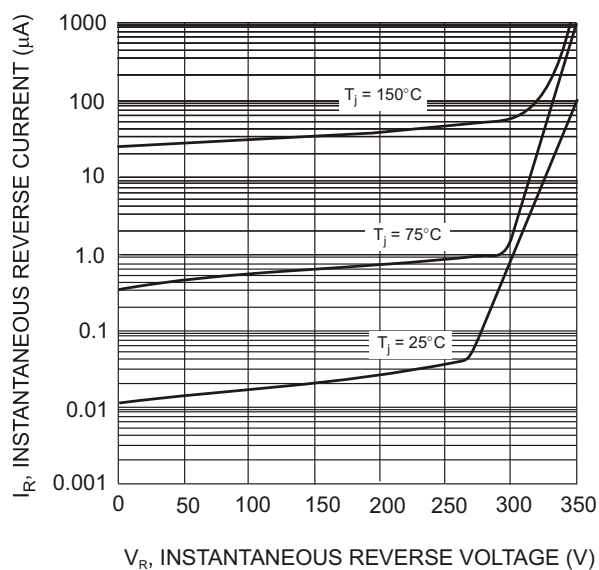


Fig. 3 Typical Reverse Characteristics, per element

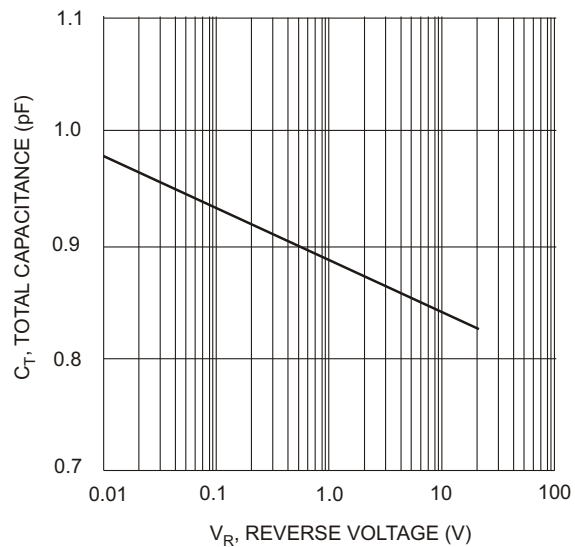
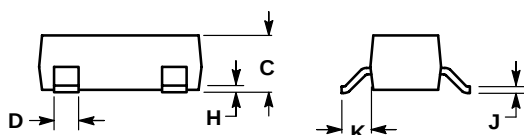
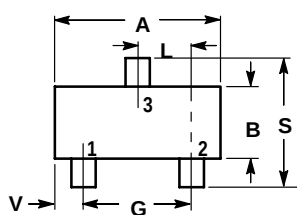


Fig. 4 Typical Total Capacitance vs. Reverse Voltage, per element

SOT-23



NOTES:

1. DIMENSIONING AND TOLERANCING PER ANSI Y14.5M,1982
2. CONTROLLING DIMENSION: INCH.

DIM	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.1102	0.1197	2.80	3.04
B	0.0472	0.0551	1.20	1.40
C	0.0350	0.0440	0.89	1.11
D	0.0150	0.0200	0.37	0.50
G	0.0701	0.0807	1.78	2.04
H	0.0005	0.0040	0.013	0.100
J	0.0034	0.0070	0.085	0.177
K	0.0140	0.0285	0.35	0.69
L	0.0350	0.0401	0.89	1.02
S	0.0830	0.1039	2.10	2.64
V	0.0177	0.0236	0.45	0.60

- PIN 1. BASE
2. EMITTER
3. COLLECTOR

