

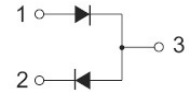
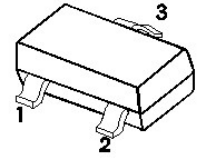
Fast Switching Speed Diode

Features

- Fast Switching Device (TRR <4nS)
- Power Dissipation of 200mW
- High Stability and High Reliability
- Low reverse leakage
- AEC-Q101 qualified (Automotive grade with suffix "Q.")
- Exsemi technology

MARKING: KJG

SOT-323



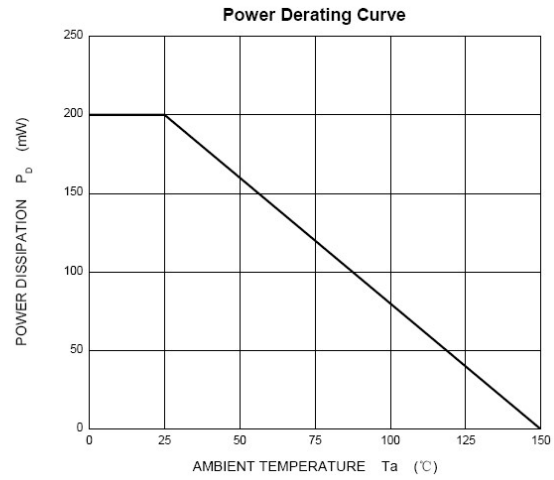
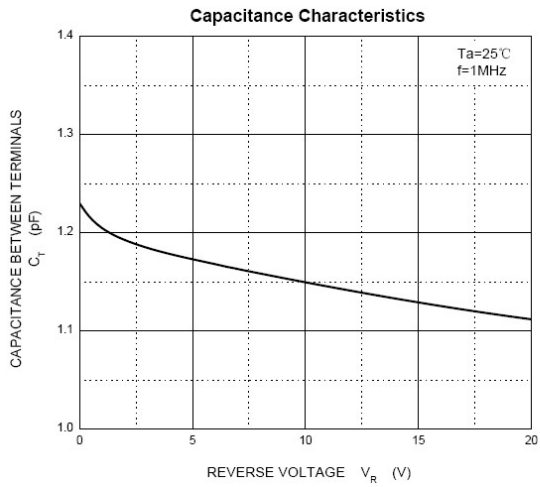
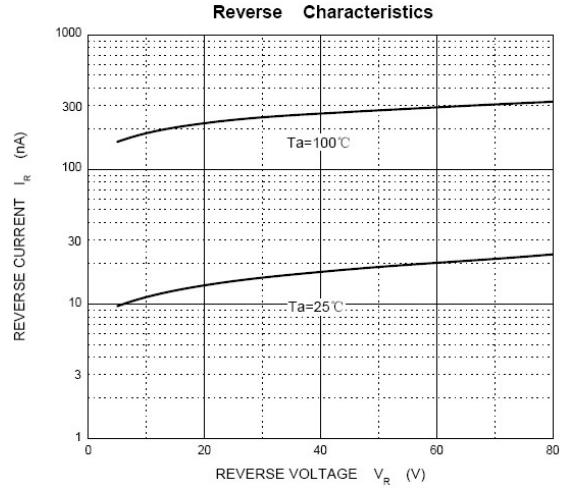
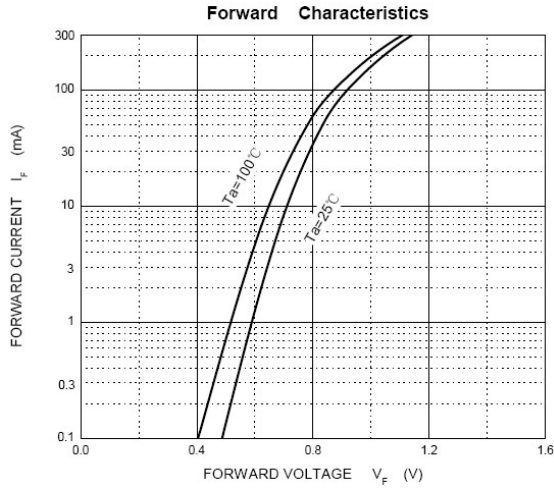
Maximum Ratings & Thermal Characteristics (Ratings at 25°C ambient temperature unless otherwise specified.)

Parameters	Symbol	Value	Unit
Reverse Voltage	V _R	75	V
Non-Repetitive Peak Reverse Voltage	V _{RM}	100	V
Power Dissipation	P _d	200	mW
Operating junction temperature	T _j	150	°C
Storage temperature range	T _s	-55-+150	°C
Average Rectified Current	I _O	150	mA
Non-repetitive Peak Forward Current	I _{FM}	300	mA
Peak Forward Surge Current @tp=1ms; TA=25°C	I _{FSM}	2.0	A
Typical thermal resistance	R _{θJA}	625	°C/W

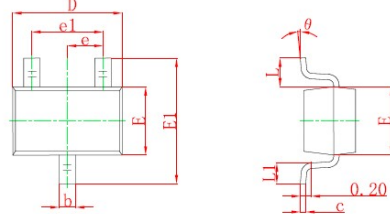
Electrical Characteristics Ratings at 25°C ambient temperature unless otherwise specified

Symbols	Parameter	Test Condition	Limits		Unit
			Min	Max	
V _R	Reverse Voltage	I _R =100uA	75	---	V
I _R	Reverse Leakage Current	V _R =25V V _R =75V	---	25 2.5	nA uA
V _F	Forward Voltage	I _F =1mA I _F =10mA I _F =50mA I _F =150mA	---	0.715 0.855 1.00 1.25	V
T _{RR}	Reverse Recovery Time	I _F = I _R =10mA, R _L =100Ω I _{RR} =0.1xI _R	---	4	nS
C _T	Capacitance	V _R =0V, f=1MHZ	---	2.0	pF

Typical Characteristics

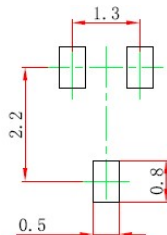


SOT-323 PACKAGE OUTLINE Plastic surface mounted package



Symbol	Dimensions in Millimeters		Dimensions in Inches	
	Min	Max	Min	Max
A	0.900	1.100	0.035	0.043
A1	0.000	0.100	0.000	0.004
A2	0.900	1.000	0.035	0.039
b	0.200	0.400	0.008	0.016
c	0.080	0.150	0.003	0.006
D	2.000	2.200	0.079	0.087
E	1.150	1.350	0.045	0.053
E1	2.150	2.450	0.085	0.096
e	0.650 TYP		0.026 TYP	
e1	1.200	1.400	0.047	0.055
L	0.525 REF		0.021 REF	
L1	0.260	0.460	0.010	0.018
θ	0°	8°	0°	8°

Precautions: PCB Design(Recommended land dimensions for SOT-323 diode. Electrode patterns for PCBs)



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