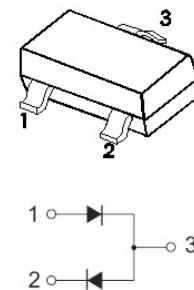


## Fast Switching Speed Diode

**SOT-323**
**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".)
- Expsemi electronics

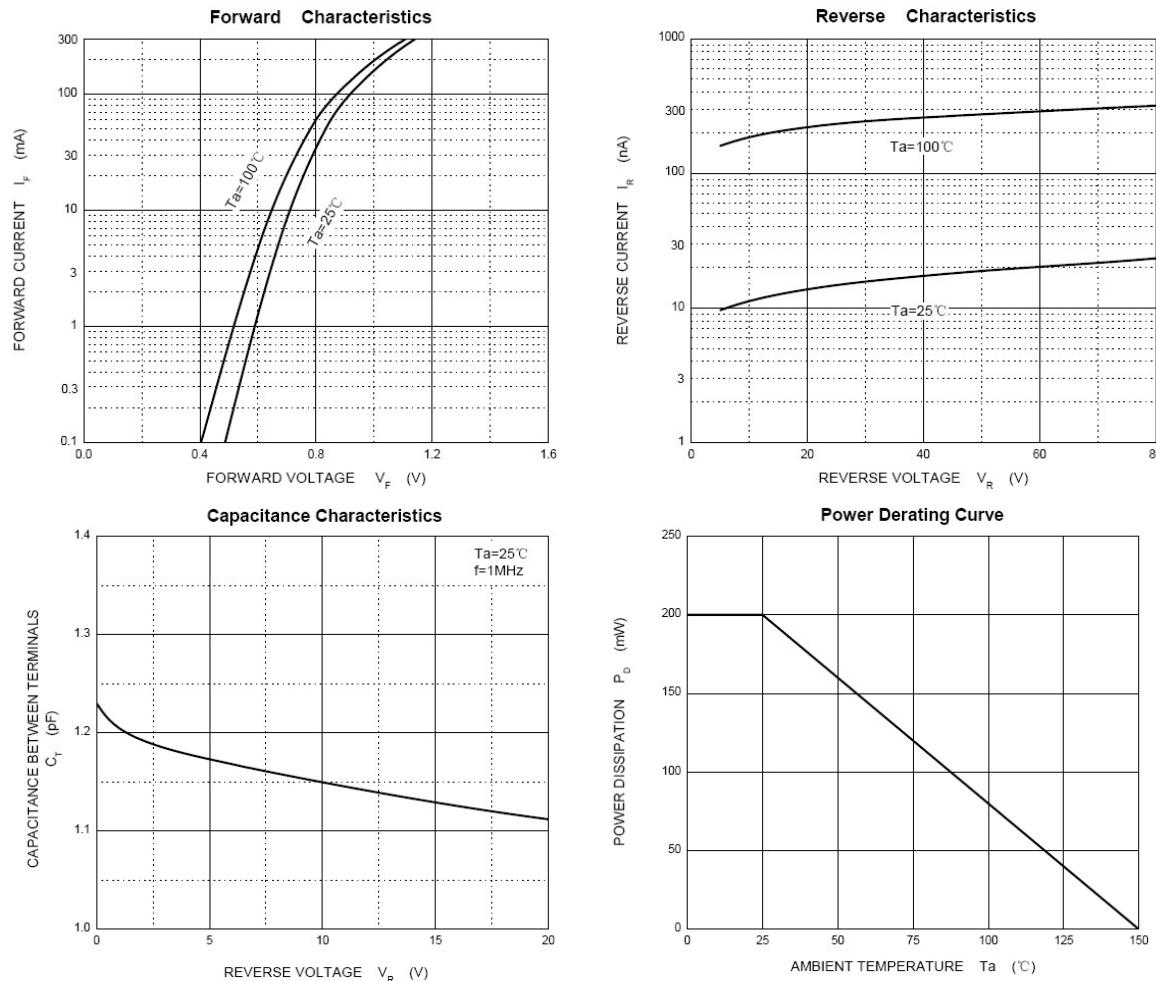

**MARKING: KJG**
**Maximum Ratings & Thermal Characteristics** (Ratings at 25°C ambient temperature unless otherwise specified.)

Parameters	Symbol	Value	Unit
Reverse Voltage	VR	75	V
Non-Repetitive Peak Reverse Voltage	V <sub>RM</sub>	100	V
Power Dissipation	P <sub>d</sub>	200	mW
Operating junction temperature	T <sub>j</sub>	150	°C
Storage temperature range	T <sub>s</sub>	-55~+150	°C
Average Rectified Current	I <sub>O</sub>	150	mA
Non-repetitive Peak Forward Current	I <sub>FM</sub>	300	mA
Peak Forward Surge Current @tp=1ms; TA=25°C	I <sub>FSM</sub>	2.0	A
Typical thermal resistance	R <sub>θJA</sub>	625	°C/W

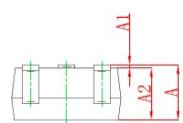
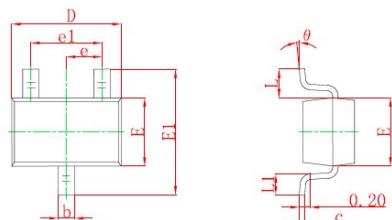
**Electrical Characteristics** Ratings at 25°C ambient temperature unless otherwise specified

Symbols	Parameter	Test Condition	Limits		Unit
			Min	Max	
VR	Reverse Voltage	I <sub>R</sub> =100uA	75	---	V
IR	Reverse Leakage Current	VR=25V VR=75V	---	25 2.5	nA uA
VF	Forward Voltage	IF=1mA	---	0.715	V
		IF=10mA	---	0.855	
		IF=50mA	---	1.00	
		IF=150mA	---	1.25	
TRR	Reverse Recovery Time	IF= IR=10mA, RL=100Ω IRR=0.1xIR	---	4	nS
CT	Capacitance	VR=0V, f=1MHZ	---	2.0	pF

## Typical Characteristics

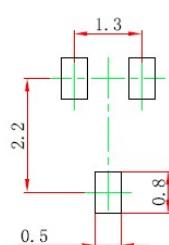


## SOT-323 PACKAGE OUTLINE Plastic surface mounted package



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	0.036	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	TYF	0.026	TYF
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
$\theta$	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:  $\pm 0.05$  mm.  
 3. The pad layout is for reference purposes only.