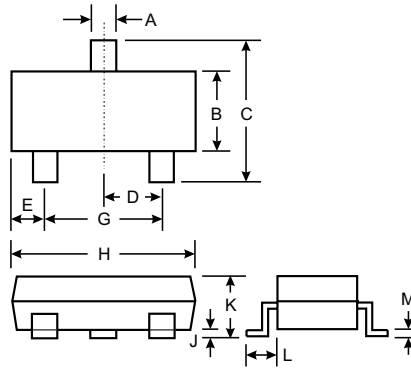


Features

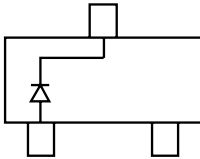
- Low Forward Voltage Drop
- Fast Switching
- Ultra-Small Surface Mount Package
- PN Junction Guard Ring for Transient and ESD Protection

Mechanical Data

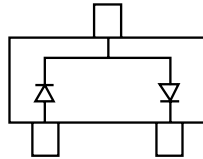
- Case: SOT-323, Molded Plastic
- Terminals: Solderable per MIL-STD-202, Method 208
- Polarity: See Diagrams
- Marking: Date Code and Marking Code (See Diagrams)
- Weight: 0.006 grams (approx.)



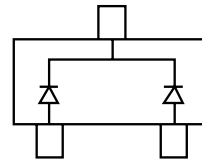
SOT-323		
Dim	Min	Max
A	0.30	0.40
B	1.15	1.35
C	2.00	2.20
D	0.65 Nominal	
E	0.30	0.40
G	1.20	1.40
H	1.80	2.20
J	0.0	0.10
K	0.90	1.00
L	0.25	0.40
M	0.10	0.25
All Dimensions in mm		



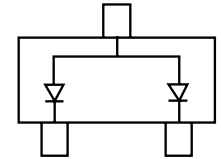
SDMG0340L Marking: KSM



SDMG0340LS Marking: KSN



SDMG0340LC Marking: KSP



SDMG0340LA Marking: KSQ

Maximum Ratings @ $T_A = 25^\circ\text{C}$ unless otherwise specified

Characteristic	Symbol	Value	Unit
Peak Repetitive Reverse Voltage	V_{RRM}	40	V
Working Peak Reverse Voltage	V_{RWM}	40	V
DC Blocking Voltage	V_R	40	V
RMS Reverse Voltage	$V_{R(RMS)}$	28	V
Average Rectified Current	I_O	30	mA
Non-Repetitive Peak Forward Surge Current @ $t = 8.3\text{ms}$	I_{FSM}	200	mA
Power Dissipation (Note 1)	P_d	200	mW
Thermal Resistance Junction to Ambient Air (Note 1)	$R_{\theta JA}$	625	$^\circ\text{C/W}$
Operating Junction Temperature Range	T_j	-40 to +125	$^\circ\text{C}$
Storage Temperature Range	T_{STG}	-40 to +125	$^\circ\text{C}$

Electrical Characteristics @ $T_A = 25^\circ\text{C}$ unless otherwise specified

Characteristic	Symbol	Min	Typ	Max	Unit	Test Condition
Reverse Breakdown Voltage (Note 2)	$V_{(BR)R}$	40	—	—	V	$I_R = 10\mu\text{A}$
Forward Voltage (Note 2)	V_F	—	295	370	mV	$I_F = 1.0\text{mA}$
Leakage Current (Note 2)	I_R	—	150	1000	nA	$V_R = 10\text{V}$
Junction Capacitance	C_j	—	2.0	—	pF	$V_R = 1\text{V}, f = 1.0\text{MHz}$

- Notes:
1. Valid provided that terminals are kept at ambient temperature.
 2. Short duration test pulse to minimize self-heating effect.

