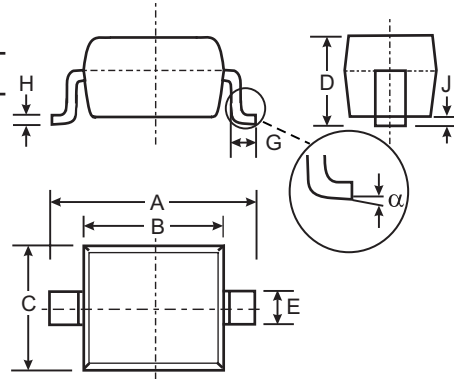


### Features

- Low Forward Voltage Drop
- Guard Ring Die Construction for Transient Protection
- Ideal for low logic level applications
- Low Capacitance
- **Lead Free/RoHS Compliant (Note 3)**

### Mechanical Data

- Case: SOD-323
- Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0
- Moisture Sensitivity: Level 1 per J-STD-020C
- Leads: Solderable per MIL-STD-202, Method 208
- Lead Free Plating (Matte Tin Finish annealed over Alloy 42 leadframe).
- Polarity: Cathode Band
- Marking: Marking Code and Date Code
- Marking Code: SR
- Weight: 0.004 grams (approx.)



SOD-323		
Dim	Min	Max
A	2.30	2.70
B	1.60	1.80
C	1.20	1.40
D	1.05 Typical	
E	0.25	0.35
G	0.20	0.40
H	0.10	0.15
J	0.05 Typical	
$\alpha$	0°	8°
<b>All Dimensions in mm</b>		

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

Characteristic	Symbol	Value	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	$V_{RRM}$ $V_{RWM}$ $V_R$	40	V
RMS Reverse Voltage	$V_{R(RMS)}$	28	V
Maximum (Peak) Forward Current	$I_{FM}$	30	mA
Non-Repetitive Peak Forward Surge Current @ 8.3ms Single half sine-wave superimposed on rated load (JEDEC method)	$I_{FSM}$	200	mA
Power Dissipation	$P_d$	160	mW
Thermal Resistance, Junction to Ambient Air	$R_{\theta JA}$	625	$^\circ\text{C}/\text{W}$
Operating and Storage Temperature Range	$T_j, T_{STG}$	-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 1)	$V_{(BR)R}$	40	—	—	V	$I_R = 10\mu\text{A}$
Forward Voltage Drop	$V_F$	—	290	370	mV	$I_F = 1\text{mA}$
Leakage Current (Note 1)	$I_R$	—	0.20	0.5	$\mu\text{A}$	$V_R = 30\text{V}$
Total Capacitance	$C_T$	—	2	—	pF	$V_R = 1\text{V}$ $f = 1.0\text{MHz}$

Notes: 1. Short duration test pulse to minimize self-heating effect.

### Ordering Information (Note 2)

Device	Packaging	Shipping
SDMK0340L-7-F	SOD-323	3000/Tape & Reel

Notes: 2. For Packaging Details, go to our website at <http://www.diodes.com/datasheets/ap02007.pdf>.  
3. No purposefully added lead.

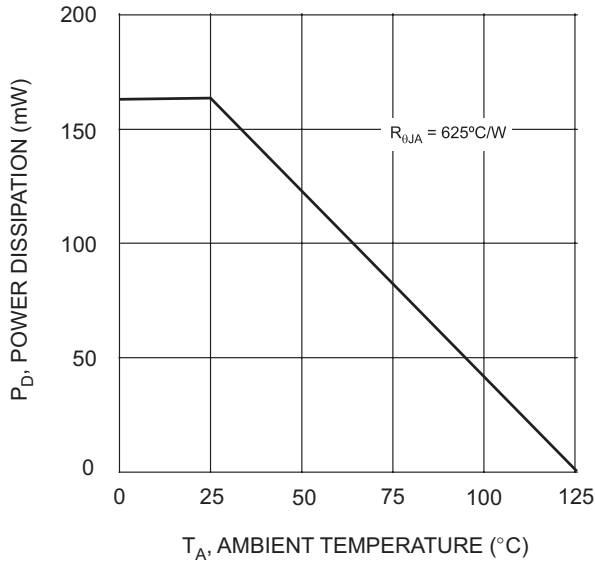


Fig. 1 Derating Curve

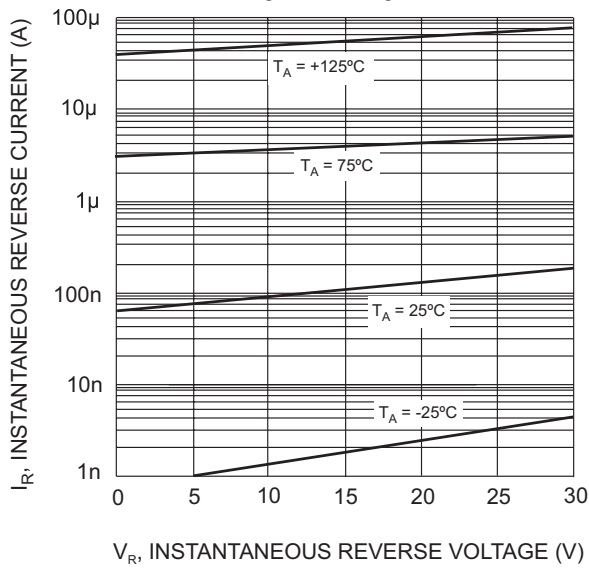


Fig. 3 Typical Reverse Characteristics

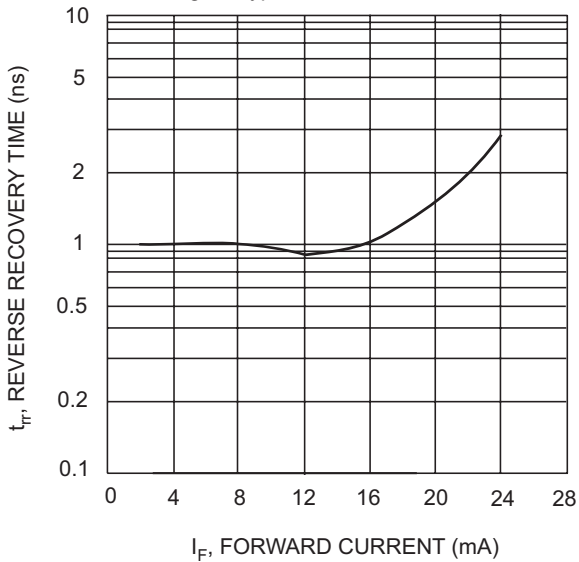


Fig. 5 Typical Reverse Recovery Time Characteristics

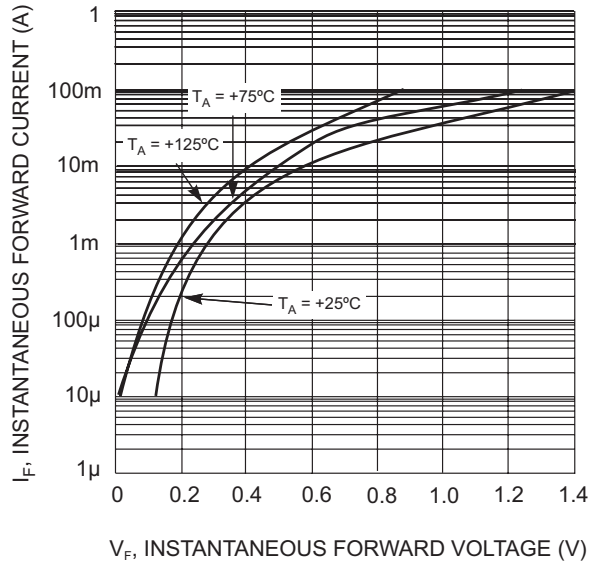


Fig. 2 Typical Forward Characteristics

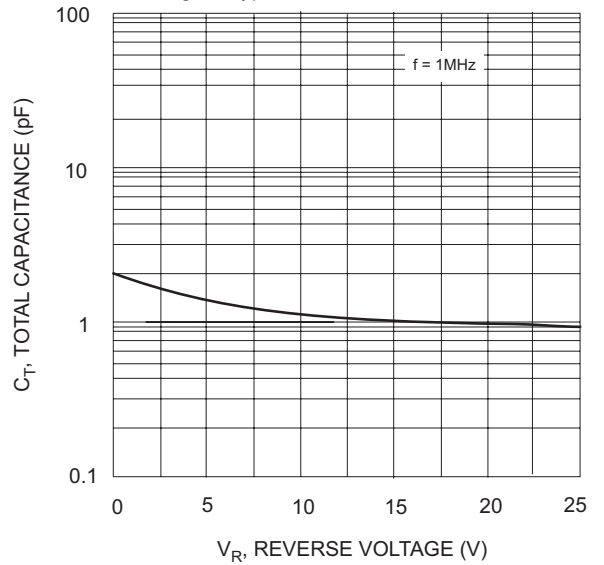


Fig. 4 Total Capacitance vs. Reverse Voltage

## Marking Information



SR = Product Type Marking Code  
See Sheet 1

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