



Schottky Barrier Diode

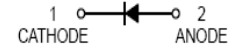
SDM10K45

FEATURES

- Fast Switching Speed
- For General Purpose Switching Applications
- High Conductance
- For detection and step-up-conversion



Lead-free



SOD-323

APPLICATIONS

- Schottky barrier detector

ORDERING INFORMATION

Type No.	Marking	Package Code
SDM10K45	LG	SOD-323

MAXIMUM RATING @ Ta=25°C unless otherwise specified

Parameter	Symbol	Limits	Unit
Peak Repetitive Reverse Voltage	V_{RRM}	45	V
Working Peak Reverse Voltage	V_{RWM}		
DC Blocking Voltage	V_R		
RMS Reverse Voltage	$V_{R(RMS)}$	40	V
Forward Continuous Current	I_{FM}	100	mA
Forward Surge Current @t<8.3ms	I_{FSM}	1.0	A
Power Dissipation	P_D	200	mW
Thermal Resistance Junction to Ambient Air	$R_{\theta JA}$	500	°C/W
Junction temperature	T_j	150	°C
Storage temperature range	T_{stg}	-40 to +150	°C

ELECTRICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Unit
Reverse Breakdown Voltage	$V_{(BR)R}$	$I_R=100\mu A$	45			V
Forward voltage	V_F	$I_F=10mA$		370	450	mV
Reverse current	I_R	$V_R=10V$		0.07	1.0	μA
Capacitance between terminals	C_T	$V_R=10V, f=1MHz$		6.0		pF

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TYPICAL CHARACTERISTICS @ $T_a=25^\circ\text{C}$ unless otherwise specified

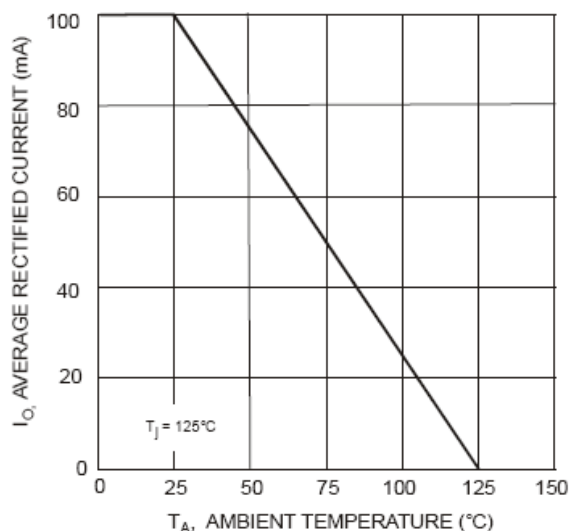


Fig. 1 Forward Current Derating Curve

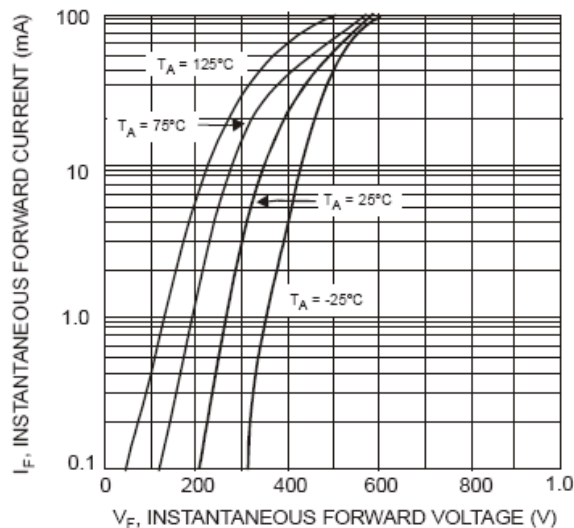


Fig. 2 Typical Forward Characteristics

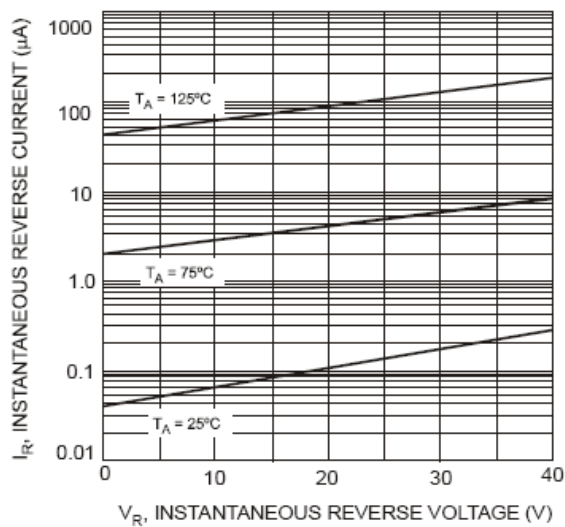


Fig. 3 Typical Reverse Characteristics

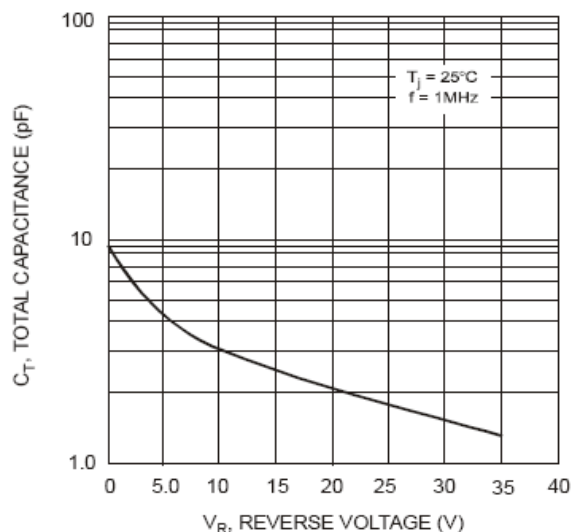


Fig. 4 Total Capacitance vs. Reverse Voltage

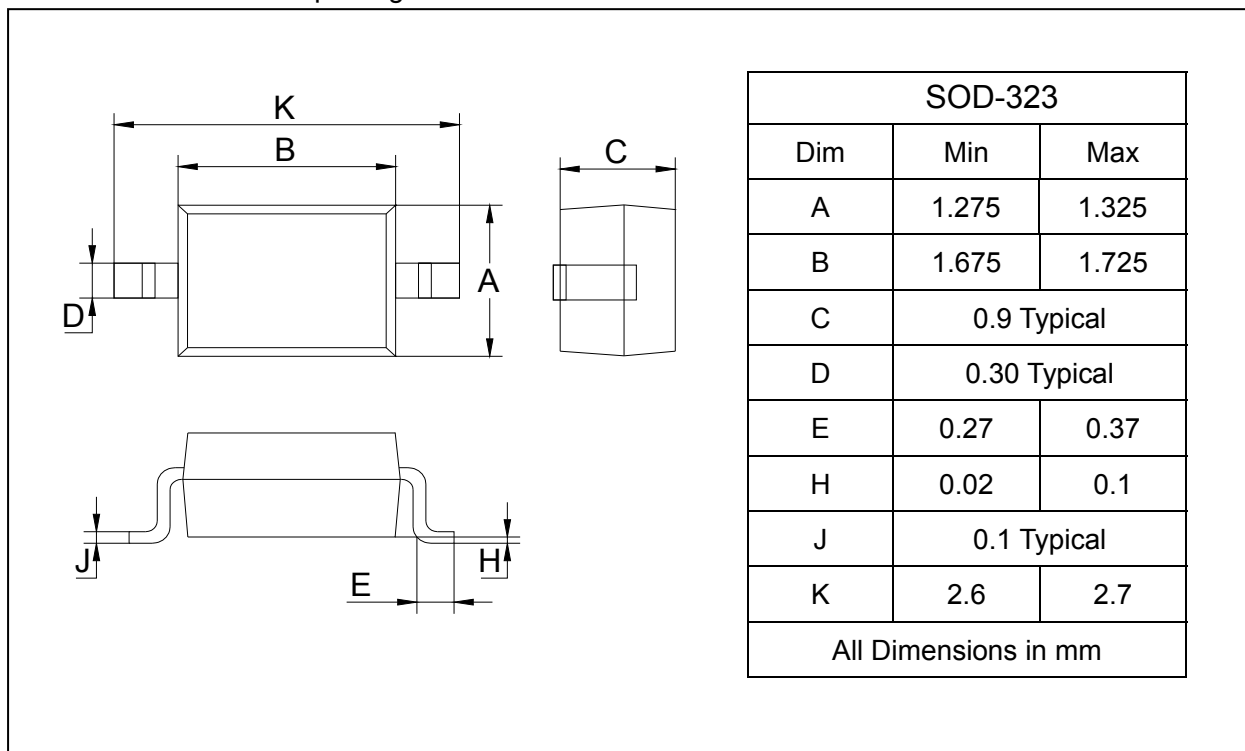
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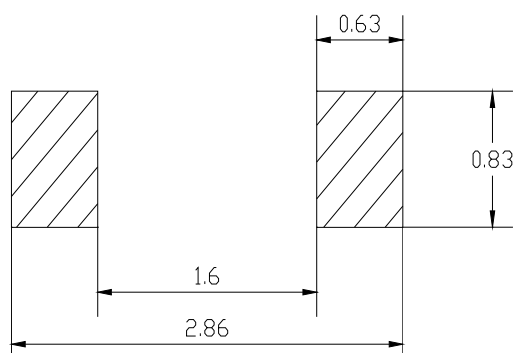
PACKAGE OUTLINE

Plastic surface mounted package

SOD-323



SOLDERING FOOTPRINT



Unit : mm

PACKAGE INFORMATION

Device	Package	Shipping
SDM10K45	SOD-323	3000/Tape&Reel