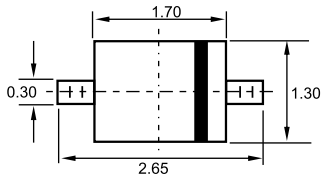
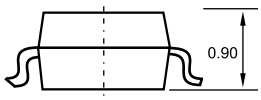
SD101AWS-SD101CWS

Schottky Diodes

SOD-323





Dimensions in inches and (millimeters)

Features

- ✧ Low Forward Voltage Drop
- ✧ Guard Ring Construction for Transient Protection
- ✧ Negligible Reverse Recovery Time
- ✧ Low Capacitance
- ✧ Ultra-small Surface Mount Package

Maximum Ratings and Electrical Characteristics

Rating at 25℃ ambient temperature unless otherwise specified.

Maximum Ratings

Parameter	Symbol	SD101AWS	SD101BWS	SD101CWS	Unit
Peak Repetitive Peak reverse voltage Working Peak DC Blocking Voltage	V_{RRM} V_{RWM} V_R	60	50	40	V
RMS Reverse Voltage	$V_{R(RMS)}$	42	35	28	V
Forward Continuous Current	I_{FM}	15			mA
Repetitive Peak Forward Current @t<1.0s @t=10μs	I_{FRM}	50 2.0			mA A
Power Dissipation	Pd	200			mW
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	625			℃/W
Storage temperature	T_{STG}	-65~+125			℃

Electrical Ratings

Parameter		Symbol	Min.	Typ.	Max.	Unit	Conditions
Reverse Breakdown Voltage	SD101AWS SD101BWS SD101CWS	$V_{(BR)R}$	60 50 40			V	I_R=10μA I_R=10μA I_R=10μA
Forward voltage	SD101AWS SD101BWS SD101CWS SD101AWS SD101BWS SD101CWS	V_F			0.41 0.40 0.39 1.00 0.95 0.90	V	I_F=1.0mA I_F=1.0mA I_F=1.0mA I_F=15mA I_F=15mA I_F=15mA
Reverse current	SD101AWS SD101BWS SD101CWS	I_{RM}			0.2	μA	V_R=50V V_R=40V V_R=30V
Capacitance between terminals	SD101AWS SD101BWS SD101CWS	C_T			2.0 2.1 2.2	pF	V_R=0V,f=1.0MHz
Reverse Recovery Time		t_{rr}			1．0	ns	I_F=I_R=5mA Irr=0.1XI_R,R_L=100Ω

Typical Characteristics

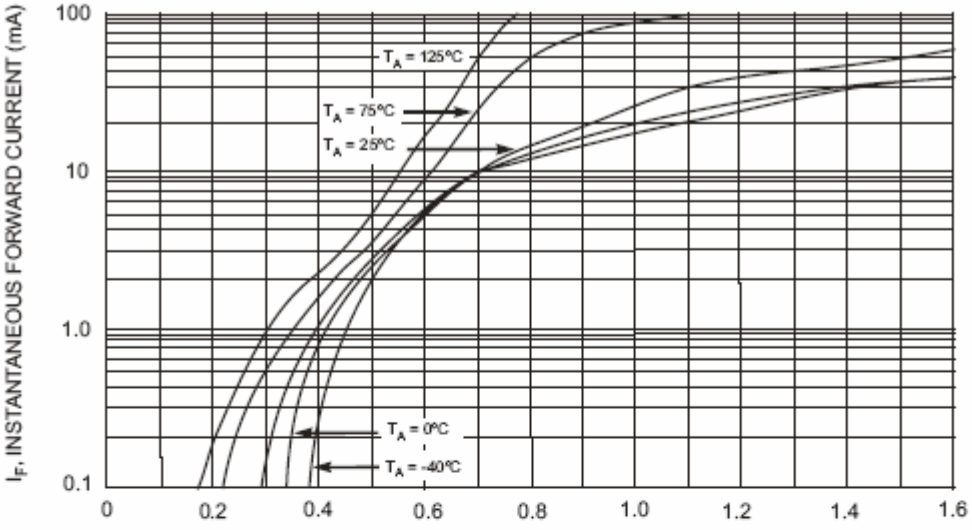


Fig. 1 Typical Forward Characteristics

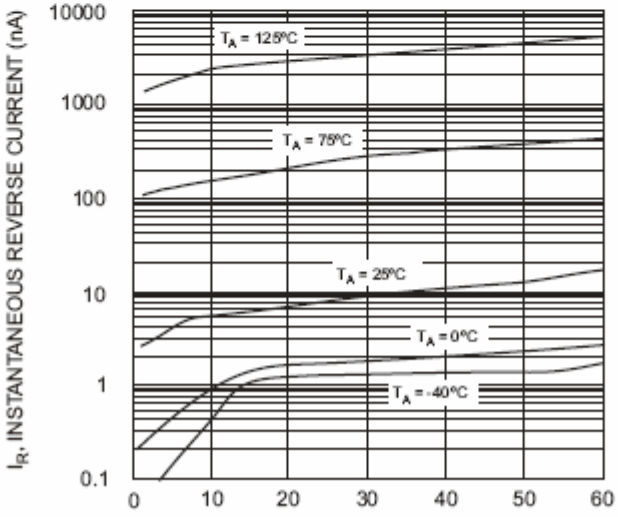


Fig. 2 Typical Reverse Characteristics

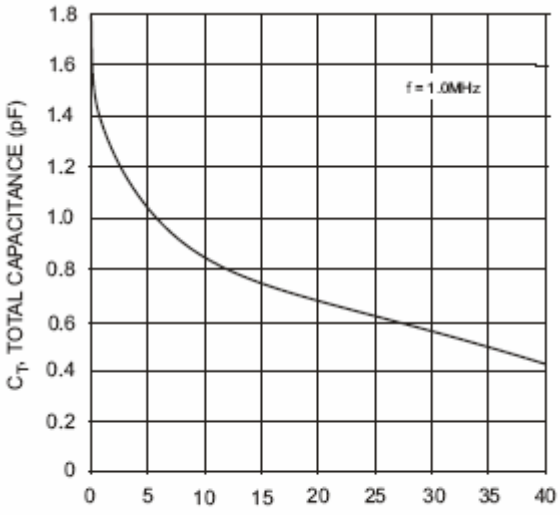


Fig. 3 Typical Capacitance

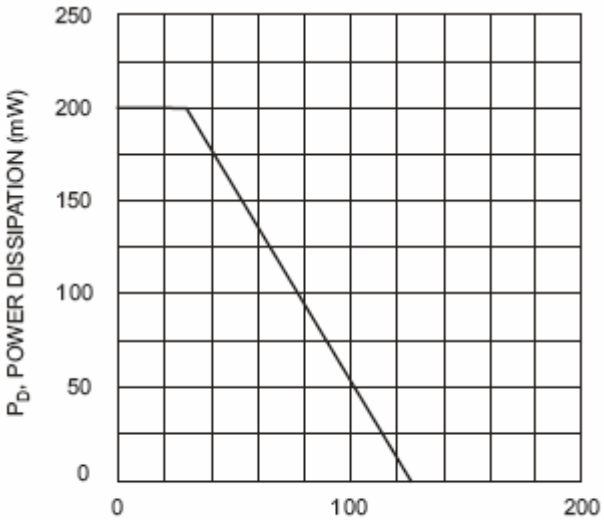


Fig. 4 Power Derating Curve, Total Package