

SD101AWS-SD101CWS SCHOTTKY DIODES

FEATURES

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

MARKING: SD101AWS: S1
SD101BWS: S2
SD101CWS: S3



Maximum Ratings and Electrical Characteristics, Single Diode @T_A=25°C

Parameter	Symbol	SD101AWS	SD101BW	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	P _d	200			mW
Thermal Resistance Junction to Ambient	R _{θJA}	625			°C/W
Storage temperature	T _{STG}	-65~+125			°C

Electrical Ratings @T_A=25°C

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Reverse Breakdown Voltage SD101AWS SD101BWS SD101CWS	V _{(BR)R}	60 50 40			V	IR=10μA IR=10μA IR=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 I _{rr} =0.1I _R , R _L =100Ω

Typical Characteristics

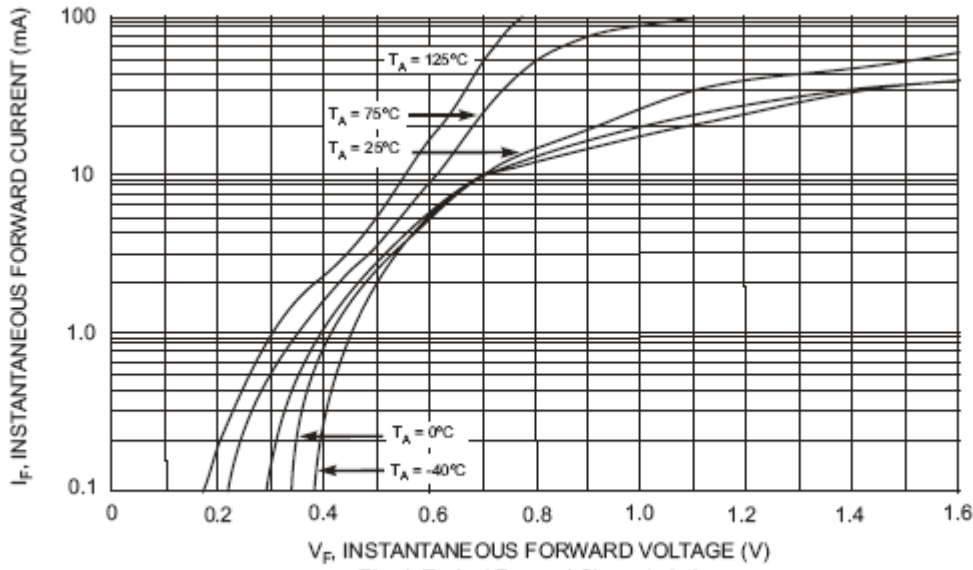


Fig. 1 Typical Forward Characteristics

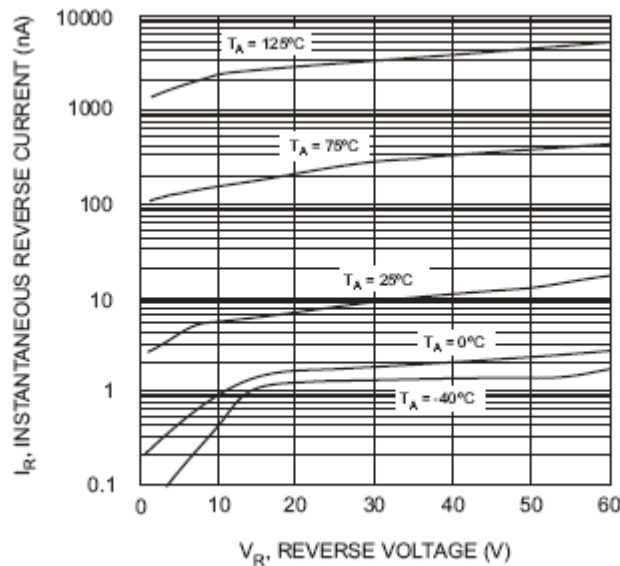


Fig. 2 Typical Reverse Characteristics

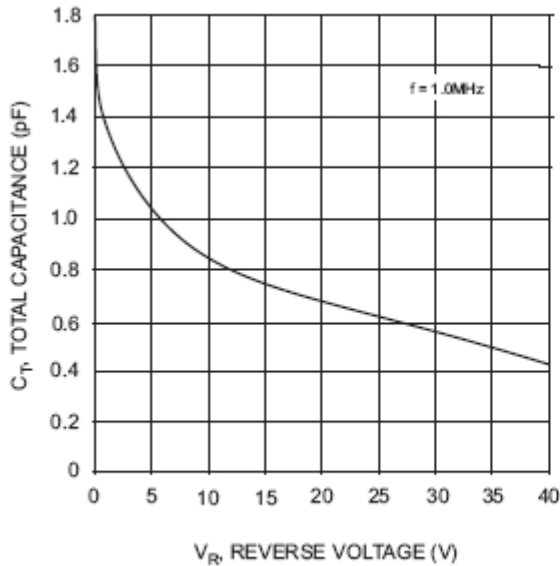


Fig. 3 Typical Capacitance

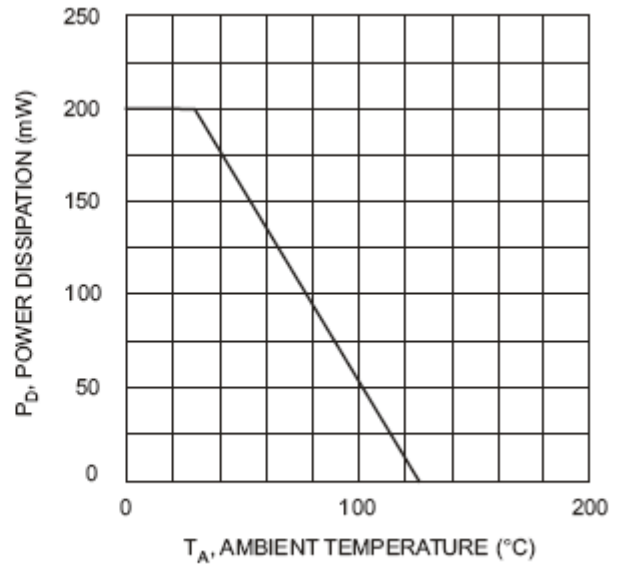


Fig. 4 Power Derating Curve, Total Package