SD101AW-SD101CW SCHOTTKY DIODES

SOD-123

FEATURES

- Low Forward Voltage Drop
- Guard Ring Construction for Transient Protection
- Negligible Reverse Recovery Time
- Very Low Reverse Capacitance

MARKING: SD101AW: S1
SD101BW: S2
SD101CW: S3

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

Parameter	Symbol	SD101AW	SD101BW	SD101CW	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	400			mW
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	300			℃/W
Storage temperature	T_{STG}	-65~+125			℃

Electrical Ratings @T_A=25℃

Parameter		Symbol	Min.	Typ.	Max.	Unit	Conditions
Reverse Breakdown Voltage	SD101AW SD101BW SD101CW	$V_{(BR)R}$	60 50 40			V	IR=10μA IR=10μA IR=10μA
Forward voltage	SD101AW SD101BW SD101CW SD101AW SD101BW SD101CW	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	SD101AW SD101BW SD101CW	I_{RM}			0.2	μA	V_R=50V V_R=40V V_R=30V
Capacitance between terminals	SD101AW SD101BW SD101CW	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

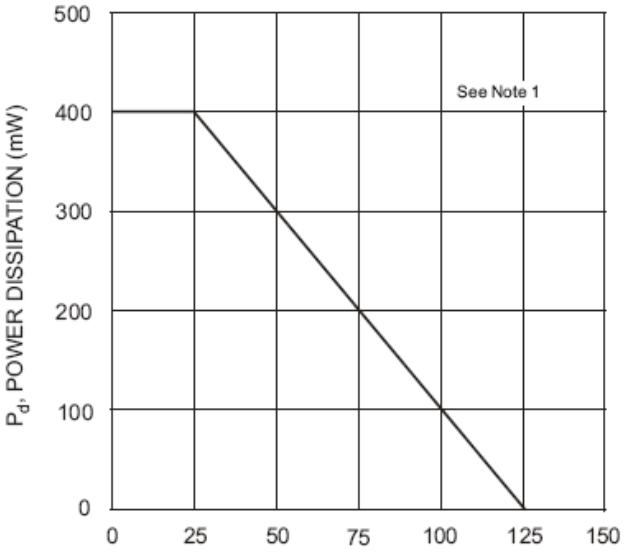

Fig.1 Power Derating Curve

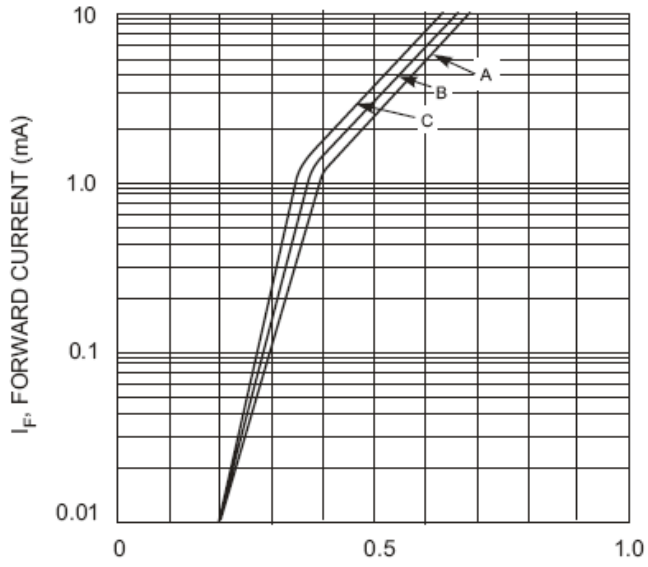

Fig. 2 Typical Forward Characteristic

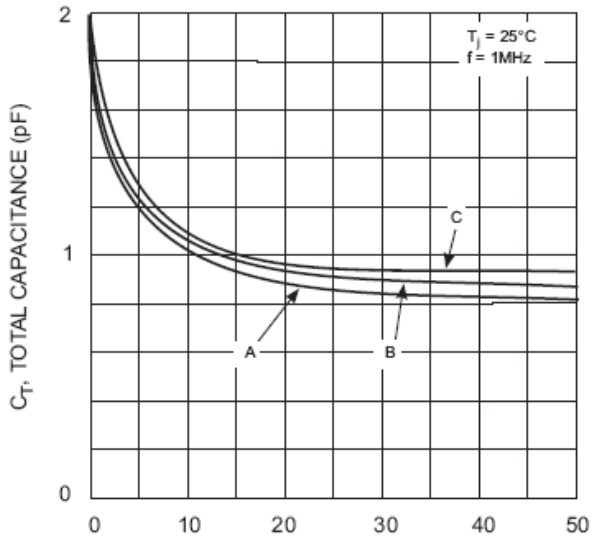

Fig. 3 Typical Total Capacitance vs Reverse Voltage

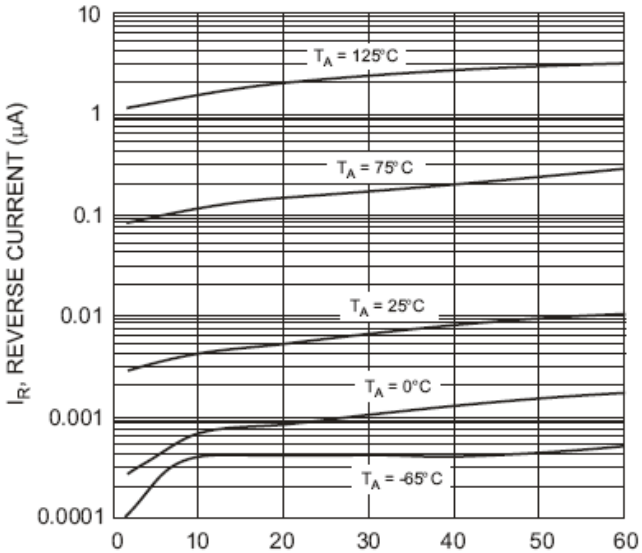

Fig. 4 Typical Reverse Characteristics