

SD101AW THRU SD101CW

**VOLTAGE RANGE
CURRENT**

**40 to 60 Volts
2.0 Ampere**

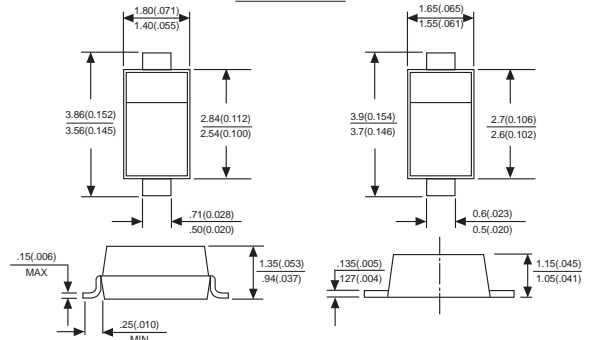
FEATURES

- Low forward voltage drop
- Guard ring construction for transient protection
- Negligible reverse recovery time

MECHANICAL DATA

- Case : Molded plastic body
- Terminals : Plated leads solderable per MIL-STD-750, Method 2026
- Polarity : Polarity symbols marked on case
- Marking : SD101AW:S1, SD101BW:S2, SD101CW:S3

SOD-123



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

- Maximum ratings and electrical characteristics, Single diode @T =25°

PARAMETER	SYMBOLS	SD101AW	SD101BW	SD101CW	UNITS
Peak repetitive peak reverse voltage	V_{RRM}				VOLTS
Working peak reverse voltage	V_{RWM}	60	50	40	
DC Blocking voltage	V_{DC}				
RMS Reverse voltage	$V_{R(RMS)}$	42	35	28	V
Forward continuous current	I_{FM}		15		mA
Repetitive peak forward current @t<1.0s	I_{FRM}		50		mA
@t=10us			2.0		A
Power dissipation	P_d		400		mW
Thermal resistance junction to ambient	$R_{\theta JA}$		300		°C/W
Storage temperature	T_{STG}		-65 to +125		°C

Electrical ratings @T_A=25°

PARAMETER	SYMBOLS	Min.	Typ.	Max.	Unit	Conditions
Reverse breakdown voltage	SD101AW SD101BW SD101CW	60 50 40			V	$I_R=10\mu A$ $I_R=10\mu A$ $I_R=10\mu A$
Forward voltage	SD101AW SD101BW SD101CW			0.41 0.40 0.39	V	$I_F=1.0mA$ $I_F=1.0mA$ $I_F=1.0mA$
	SD101AW SD101BW SD101CW			1.00 0.95 0.90		$I_F=15mA$ $I_F=15mA$ $I_F=15mA$
Reverse current	SD101AW SD101BW SD101CW			0.2	uA	$V_R=50V$ $V_R=40V$ $V_R=30V$
Capacitance between terminals	SD101AW SD101BW SD101CW			2.0 2.1 2.2	pF	$V_R=0V, f=1.0MHz$
Reverse recovery time				1.0	ns	$I_F=I_R=5mA$ $I_{rr}=0.1X I_R, R_L=100\Omega$

FIG. 1- POWER DERATING CURVE

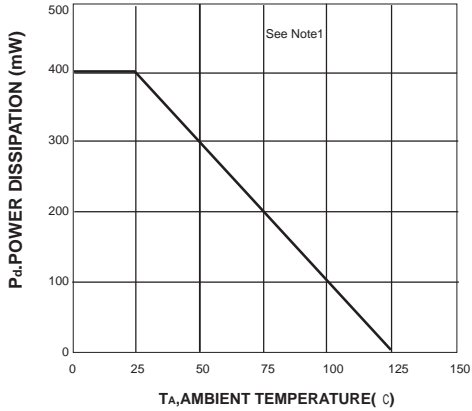


FIG. 2-TYPICAL FORWARD CHARACTERISTIC

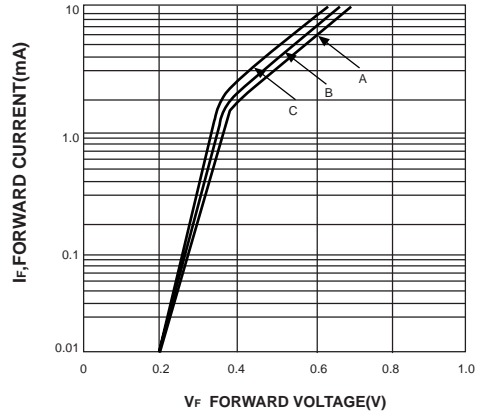


FIG. 3- TYPICAL TOTAL CAPACITANCE VS REVERSE VOLTAGE

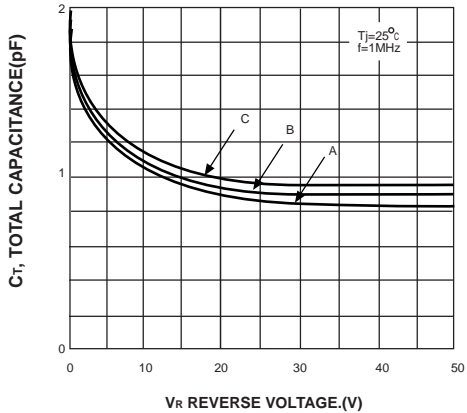


FIG. 4- TYPICAL REVERSE CHARACTERISTICS

