

SCHOTTKY DIODES

SD101WAS THRU SD101CWS

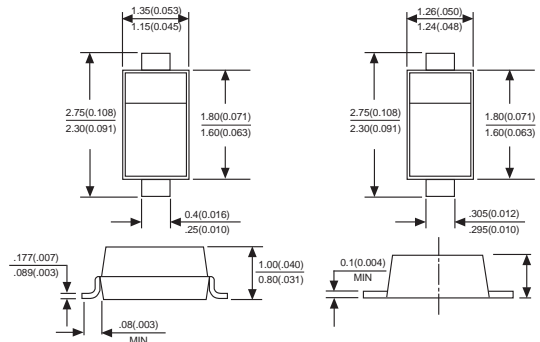
VOLTAGE RANGE
CURRENT

40 to 60 Volts
2.0 Ampere

FEATURES

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

SOD-323



MECHANICAL DATA

- Case : Molded plastic body
- Terminals : Plated leads solderable per MIL-STD-750,
- Polarity : Polarity symbols marked on case Method 2026
- Marking: SD101AWS:S1, SD101BWS:S2, SD101CWS:S3

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

- Maximum ratings and electrical characteristics, Single diode @ $T_A=25^{\circ}\text{C}$

PARAMETER	SYMBOLS	SD101AWS	SD101BWS	SD101CWS	UNITS
Peak repetitive peak reverse voltage	V_{RRM}				VOLTS
Working peak reverse voltage	V_{RMS}	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 @ $t < 1.0s$ @ $t = 10\mu s$	I_{FRM}		50 2.0		mA A
Power dissipation	P_d		200		mW
Thermal resistance junction to ambient	$R_{\theta JA}$		300		$^{\circ}\text{C}/\text{W}$
Storage temperature	T_{STG}		-65 to +125		$^{\circ}\text{C}$

- Electrical ratings @ $T_A=25^{\circ}\text{C}$

PARAMETER	SYMBOLS	Min.	Typ.	Max.	Unit	Conditions
Reverse breakdown voltage	SD101AWS SD101BWS SD101CWS	$V_{(BR)R}$	60 50 40		V	$I_R=10\mu A$ $I_R=10\mu A$ $I_R=10\mu A$
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	$I_F=I_R=5mA$ $I_{rr}=0.1X I_R, R_L=100\Omega$

FIG. 1- POWER DERATING CURVE

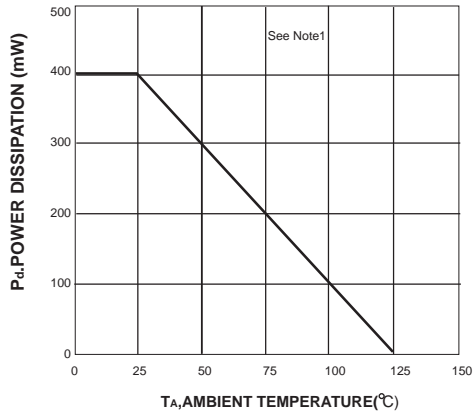


FIG. 2-TYPICAL FORWARD CHARACTERISTIC

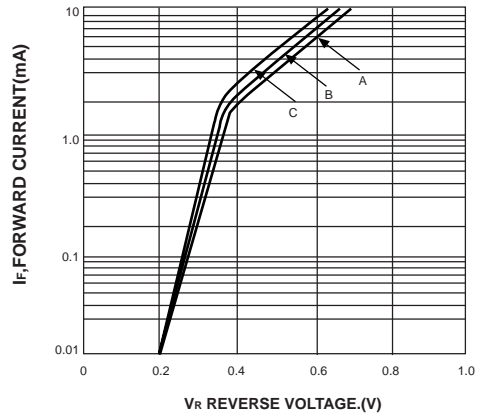


FIG. 3- TYPICAL TOTAL CAPACITANCE VS REVERSE VOLTAGE

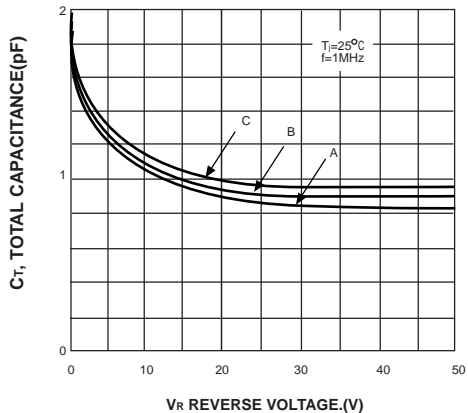


FIG. 4- TYPICAL REVERSE CHARACTERISTICS

