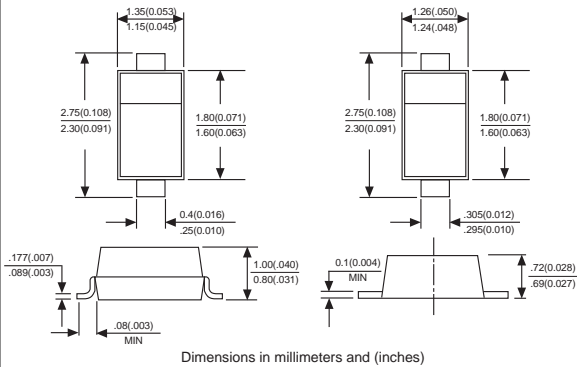




SD101AWS-SD101CWS

SCHOTTKY DIODES

SOD-323



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: SD101AWS:S1, SD101BWS:S2, SD101CWS:S3

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Maximum ratings and electrical characteristics, Single diode @T_A=25°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	I _{FRM}		50		mA
@t=10us			2.0		A
Power dissipation	P _d		200		mW
Thermal resistance junction to ambient	R _{θJA}		300		°C/W
Storage temperature	T _{STG}		-65 to +125		°C

Electrical ratings @T_A=25°C

PARAMETER	SYMBOLS	Min.	Typ.	Max.	Unit	Conditions
Reverse breakdown voltage	SD101AWS SD101BWS SD101CWS	V _{(BR)R}	60 50 40		V	I _R =10uA I _R =10uA I _R =10uA
Forward voltage	SD101AWS SD101BWS SD101CWS	V _F		0.41 0.40 0.39	V	I _F =1.0mA I _F =1.0mA I _F =1.0mA
	SD101AWS SD101BWS SD101CWS			1.00 0.95 0.90		I _F =15mA I _F =15mA I _F =15mA
Reverse current	SD101AWS SD101BWS SD101CWS	I _{RM}		0.2	uA	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 =100Ω

RATINGS AND CHARACTERISTIC CURVES SD101AWS-SD101CWS

FIG. 1- POWER DERATING CURVE

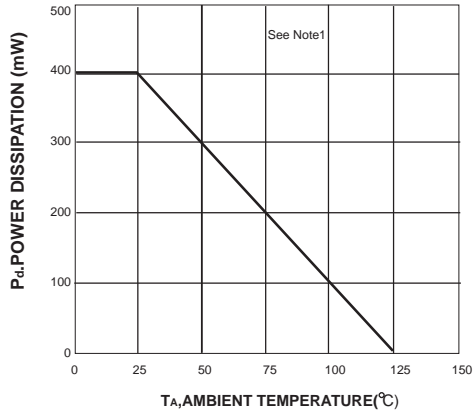


FIG. 2-TYPICAL FORWARD CHARACTERISTIC

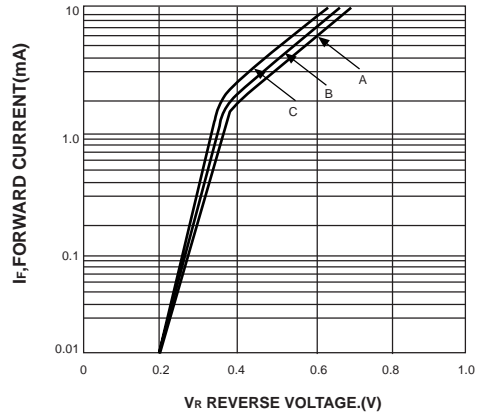


FIG.3- TYPICAL TOTAL CAPACITANCE VS REVERSE VOLTAGE

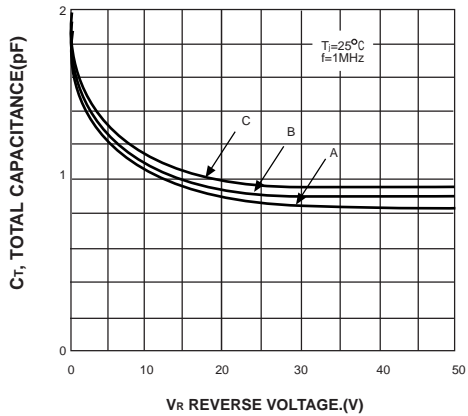


FIG. 4- TYPICAL REVERSE CHARACTERISTICS

