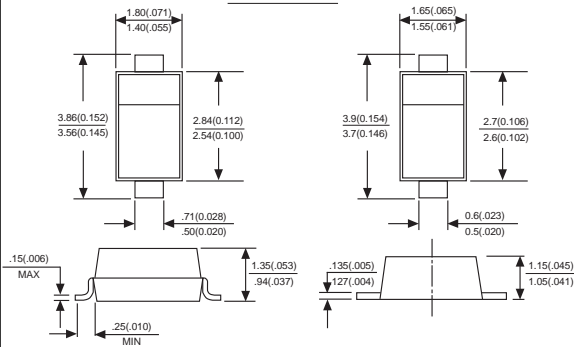




SD101AW-SD101CW

SCHOTTKY DIODES

SOD-123



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

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Maximum ratings and electrical characteristics, Single diode @T_A=25°C

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 @t=10us	I _{FRM}		50		mA
			2.0		A
Power dissipation	P _d		400		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	SD101AW	V _{(BR)R}	60			V	I _R =10uA
	SD101BW		50				I _R =10uA
	SD101CW		40				I _R =10uA
Forward voltage	SD101AW	V _F			0.41	V	I _F =1.0mA
	SD101BW				0.40		I _F =1.0mA
	SD101CW				0.39		I _F =1.0mA
	SD101AW				1.00		I _F =15mA
	SD101BW				0.95		I _F =15mA
	SD101CW				0.90		I _F =15mA
Reverse current	SD101AW SD101BW SD101CW	I _{RM}			0.2	uA	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 I _{rr} =0.1X I _R , R _L =100Ω

RATINGS AND CHARACTERISTIC CURVES SD101AW-SD101CW

FIG. 1- POWER DERATING CURVE

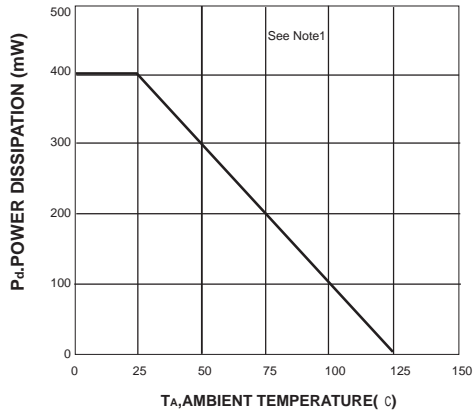


FIG. 2-TYPICAL FORWARD CHARACTERISTIC

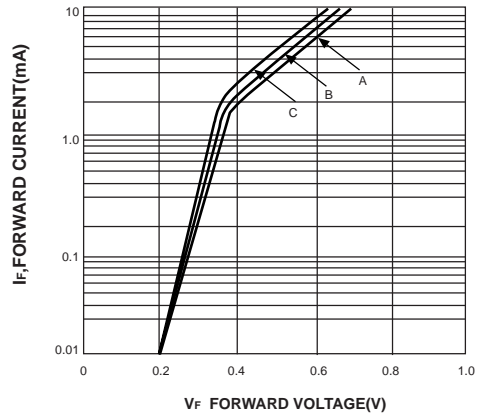


FIG.3- TYPICAL TOTAL CAPACITANCE VS REVERSE VOLTAGE

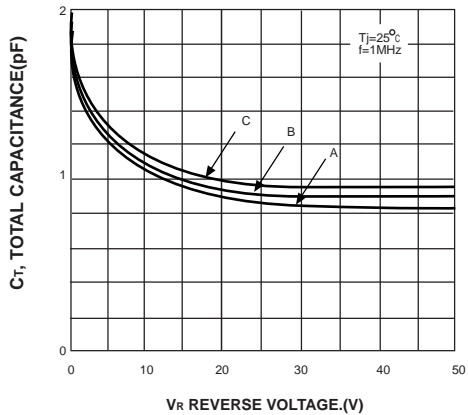
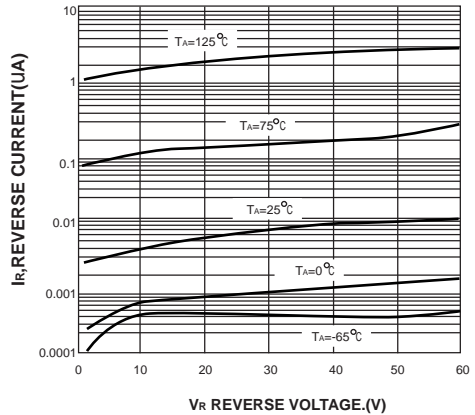


FIG. 4- TYPICAL REVERSE CHARACTERISTICS



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