Elektronische Bauelemente

SD101AW/SD101BW/SD101CW

Voltage: 40V~60V

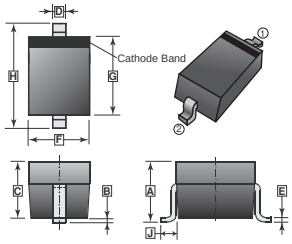
Plastic-Encapsulate Schottky Diodes

RoHS Compliant Product
A suffix of "-C" specifies halogen & lead-free

SOD-123

FEATURES

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



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	0.95	1.35	F	1.40	1.80
B	0.10 REF.		G	2.55	2.85
C	1.05	1.15	H	3.55	3.85
D	0.30	0.78	J	-	-
E	0.08	0.25			

MARKING : SD101AW: S1

SD101BW: S2

SD101CW: S3

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS at T_A = 25℃

PARAMETER		SYMBOL	SD101AW	SD101BW	SD101CW	UNIT
Peak Repetitive Peak Reverse voltage		V_{RM}	60	50	40	V
Working Peak		V_{RWM}	60	50	40	V
DC Blocking Voltage		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	I_{FRM}	50			mA
	@t=10μS		2.0			A
Power Dissipation		P_D	400			mW
Thermal Resistance Junction to Ambient		$R_{\theta JA}$	300			℃/W
Storage Temperature		T_{STG}	-65~125			℃

ELECTRICAL RATING at T_A = 25℃

PARAMETERS		SYMBOL	MIN.	MAX.	UNIT	TEST CONDITIONS
Reverse Breakdown Voltage	SD101AW	$V_{(BR)R}$	60		V	I_R = 10μA
	SD101BW		50			
	SD101CW		40			
Forward Voltage	SD101AW	V_{F1}		0.41	mV	I_F =1.0mA
	SD101BW			0.40		
	SD101CW			0.39		
Forward Voltage	SD101AW	V_{F2}		1.00		I_F =15mA
	SD101BW			0.95		
	SD101CW			0.90		
Reverse Current	SD101AW	I_{RM}		0.2	μA	V_R = 50V
	SD101BW			0.2		V_R = 40V
	SD101CW			0.2		V_R = 30V
Capacitance between Terminals	SD101AW	C_T		2.0	pF	V_R =0V, f=1.0MHz
	SD101BW			2.1		
	SD101CW			2.2		
Reverse Recovery Time		T_{rr}		1.0	ns	I_F = I_R =5mA, I_{rr}=0.1XI_R, R_L =100Ω

RATINGS AND CHARACTERISTIC CURVES

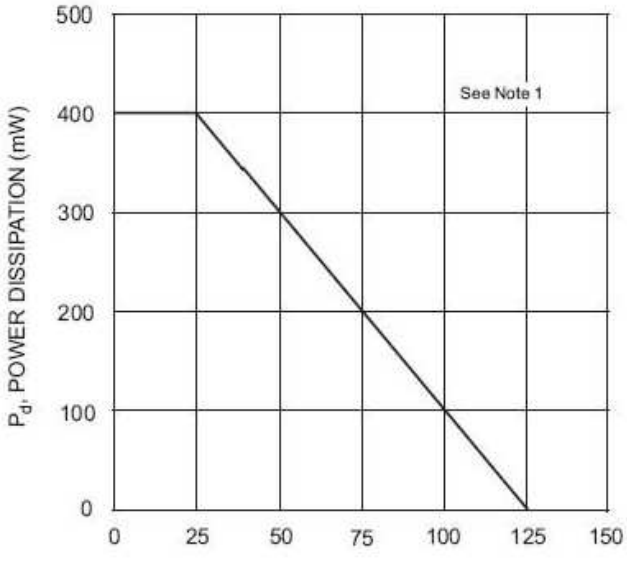


Fig.1 Power Derating Curve

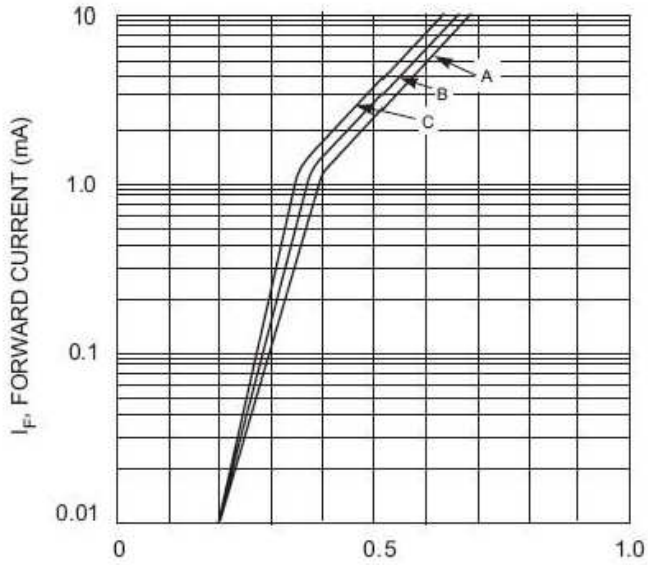


Fig. 2 Typical Forward Characteristic

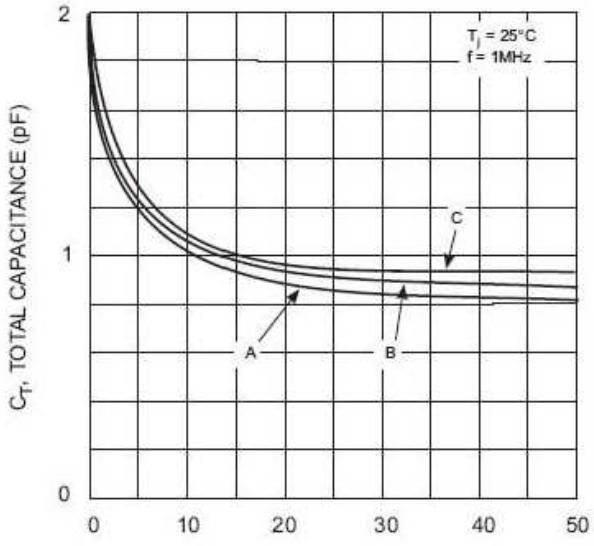


Fig. 3 Typical Total Capacitance vs Reverse Voltage

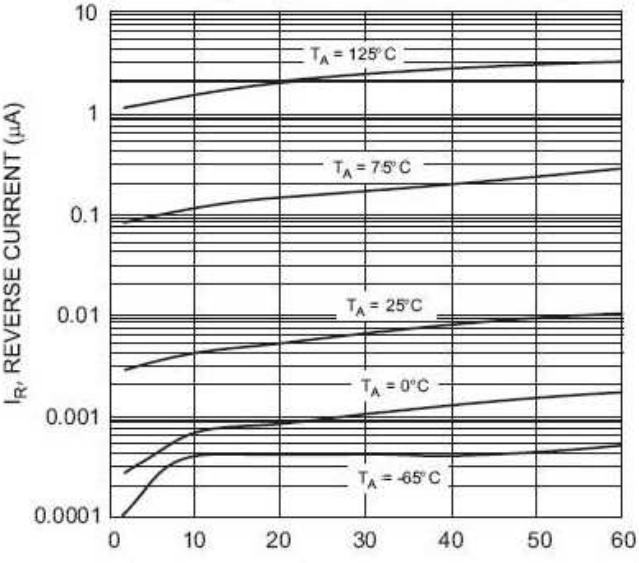


Fig. 4 Typical Reverse Characteristics