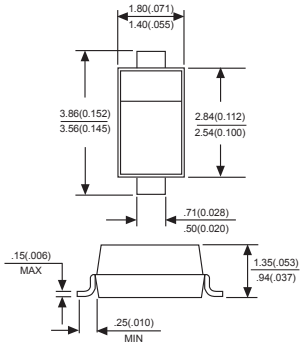
MegaPower Semiconductor

SD103AW-SD103CW

SCHTTKY DIODES

SOD-123



Dimensions in millimeters and (inches)

FEATURES

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

MECHANICAL DATA

Case: Molded plastic body
Terminals: Plated leads solderable per MIL-STD-750, Method 2026
Polarity: Polarity symbols marked on case
Mounting Position: Any
Marking: SD103AW:S4, SD103BW:S5, SD103CW:S6

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

PARAMETER	SYMBOLS	SD103AW	SD103BW	SD103CW	UNITS
Peak repetitive peak reverse voltage Working peak reverse voltage DC Blocking voltage	V_{RRM} V_{RWM} V_{DC}	40	30	20	VOLTS
RMS Reverse voltage	$V_{R(RMS)}$	28	21	14	V
Forward continuous current	I_{FM}	350			mA
Repetitive peak forward current @t≤1.0s	I_{FRM}	1.5			A
Power dissipation	Pd	400			mW
Thermal resistance junction to ambient	$R_{\Theta JA}$	300			℃/W
Storage temperature	T_{STG}	-65 to +125			℃

Electrical ratings @T_A=25℃

PARAMETER		SYMBOLS	Min.	Typ.	Max.	Unit	Conditions
Reverse breakdown voltage	SD103AW	$V_{(BR)R}$	40			V	IR=100uA
	SD103BW		30				IR=100uA
	SD103CW		20				IR=100uA
Fowrard voltage		V_F			0.37	V	I_F=20mA
					0.60		I_F=200mA
Reverse current	SD103AW	I_{RM}			5.0	uA	V_R=30V
	SD103BW						V_R=20V
	SD103CW						V_R=10V
Capacitance between terminals		C_T		50		pF	V_R=0V,f=1.0MHz
Reverse recovery time		t_{rr}		10		ns	I_F=I_R=200mA Irr=0.1XI_R,R_L=100Ω

FIG. 1- TYPICAL FORWARD CHARACTERISTICS

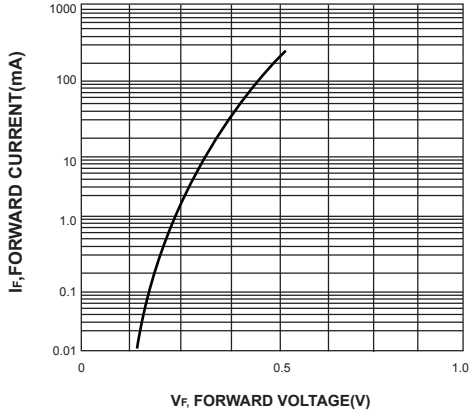


FIG. 2-TYP. JUNCTION CAPACITANCE VS REVERSE VOLTAGE