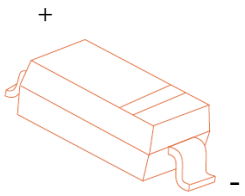
UDE SOD-123 Plastic-Encapsulate Diodes

SD103AW-SD103CW SCHOTTKY DIODES

SOD-123



FEATURES

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

MARKING: SD103AW: S4
SD103BW: S5
SD103CW: S6

Maximum Ratings and Electrical Characteristics, Single Diode @T_A=25℃

Parameter	Symbol	SD103AW	SD103BW	SD103CW	Unit
Peak Repetitive Peak reverse voltage **Working Peak** **DC Blocking Voltage**	V_{RRM} V_{RWM} V_R	40	30	20	V
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	500			mW
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	250			℃/W
Storage temperature	T_{STG}	-65~+150			℃

Electrical Ratings @T_A=25℃

Parameter		Symbol	Min.	Typ.	Max.	Unit	Conditions
Reverse Breakdown Voltage	SD103AW	$V_{(BR)R}$	40			V	I_R=100μA
	SD103BW		30				I_R=100μA
	SD103CW		20				I_R=100μA
Forward voltage		V_F			0.37 0.60	V	I_F=20mA I_F=200mA
Reverse current	SD103AW SD103BW SD103CW	I_{RM}			5.0	μA	V_R=30V V_R=20V 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

Typical Characteristics

SD103AW-SD103CW

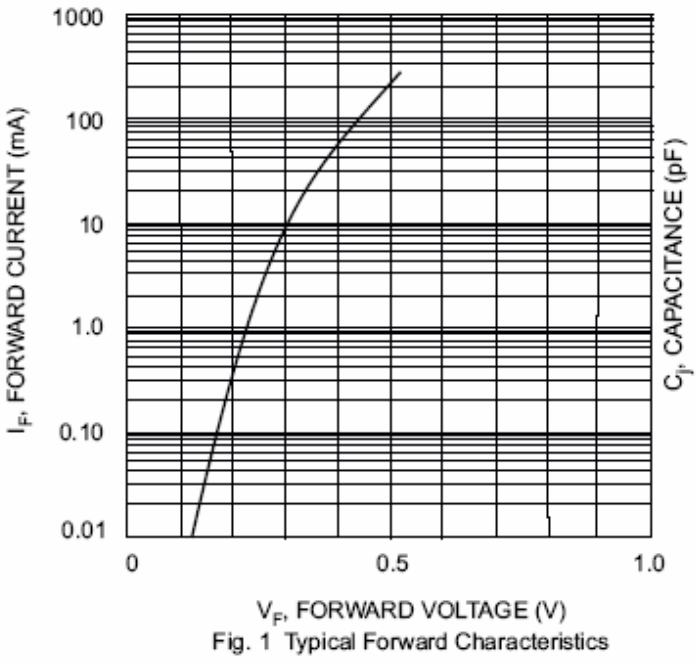


Fig. 1 Typical Forward Characteristics

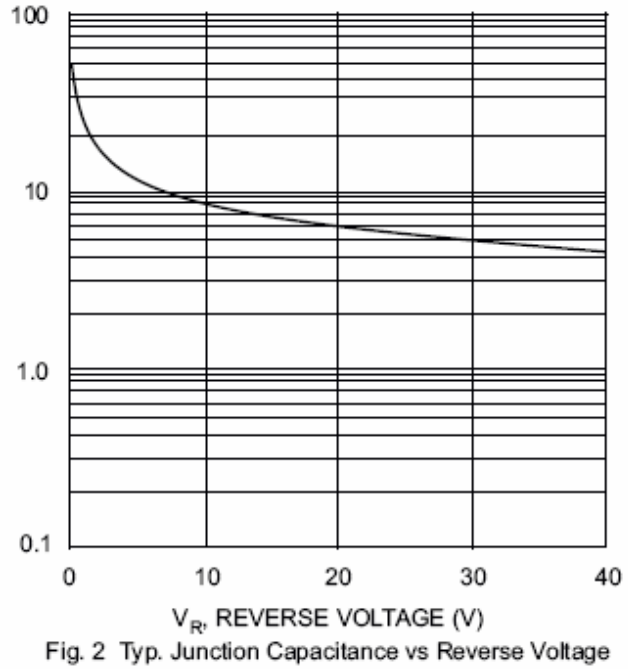


Fig. 2 Typ. Junction Capacitance vs Reverse Voltage