

SCHOTTKY DIODES

FEATURES

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

MECHANICAL DATA

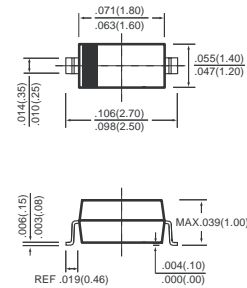
- * Case: Molded plastic
- * Epoxy: UL 94V-O rate flame retardant
- * Lead: MIL-STD-202E method 208C guaranteed
- * Mounting position: Any
- * Weight: 0.004 grams

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.
Single phase, half wave, 60 Hz, resistive or inductive load.
For capacitive load, derate current by 20%.



SOD-323



MAXIMUM RATINGS (@ $T_A=25^\circ\text{C}$ unless otherwise noted)

RATINGS	SYMBOL	SD101CWS	UNITS
Peak Repetitive Peak reverse voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RMR} V_{RWR} V_R	40	Volts
RMS Reverse Voltage	$V_{R(RMS)}$	28	Volts
Maximum Forward Continuous Current	I_{FM}	15	mAmps
Non-Repetitive Peak Forward Surge Current	I_{FSM}	50 2.0	mAmps Amps
Maximum Power Dissipation	P_D	200	mW
Thermal Resistance junction to ambient	$R_{\theta JA}$	300	$^\circ\text{C}/\text{W}$
Operating and Storage Temperature Range	T_J, T_{STG}	-65 to + 125	$^\circ\text{C}$

ELECTRICAL CHARACTERISTICS (@ $T_A = 25^\circ\text{C}$ unless otherwise noted)

CHARACTERISTICS	SYMBOL	MIN.	TYP.	MAX.	UNITS
Reverse Breakdown Voltage ($I_R=10\mu\text{A}$)	$V(BR)R$	40	-	-	V
Reverse voltage leakage current ($V_R=30\text{V}$)	I_R	-	-	0.2	μA
Forward voltage ($I_F=1.0\text{mA}$) ($I_F=15\text{mA}$)	V_F	-	-	0.39 0.90	V
Capacitance between terminals ($V_R=0\text{V}, f=1\text{MHz}$)	C_T	-	-	2.2	pF
Reverse Recovery Time ($I_F=I_R=5\text{mA}, R_L=100\Omega, I_{rr}=0.1I_R$)	t_{rr}	-	-	1.0	ns

RATING AND CHARACTERISTICS CURVES (SD101CWS)

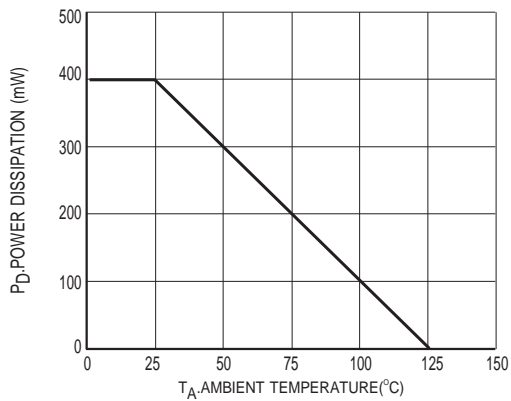


Figure1 Power Derating Curve

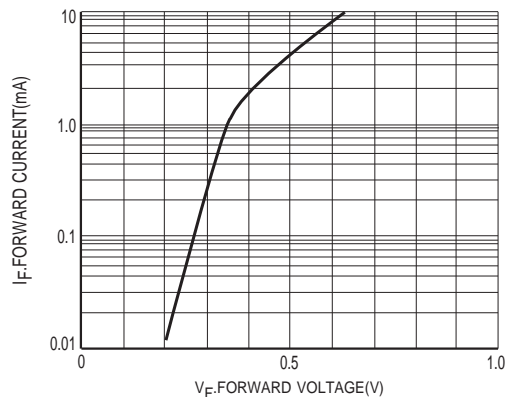


Figure2 Typical Forward Characteristics

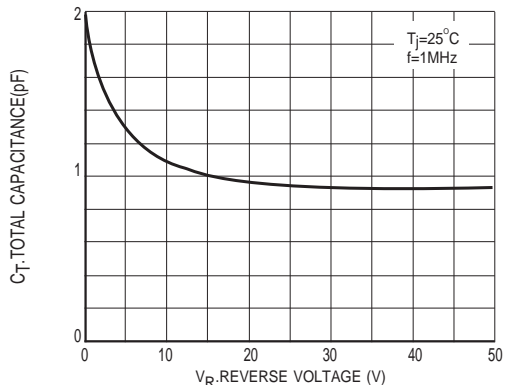


Figure3 Typical Total Capacitance vs Reverse Voltage

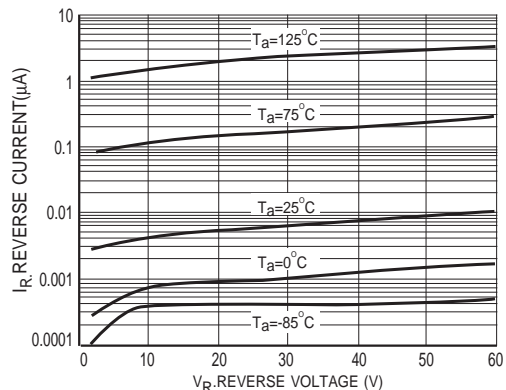


Figure4 Typical Reverse Characteristics

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