

Surface Mount Switching Diodes



CDSW4148, CDSW4448

Voltage: 100 Volts
Power: 410 - 500 mW

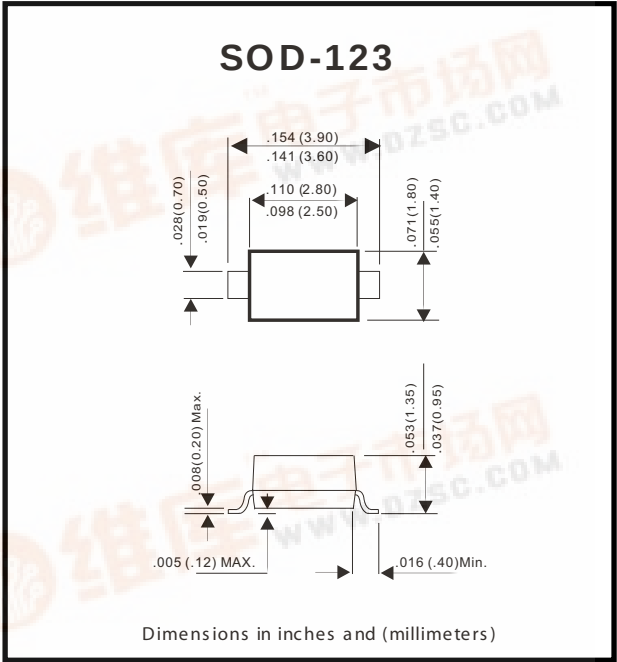


FEATURES

- Fast switching Speed
- Electrically Identical to Standard JEDEC
- High Conductance
- Surface Mount Package Ideally Suited for Automatic Insertion
- Flat package SOD-123 in stead mini-MELF package.

MECHANICAL DATA

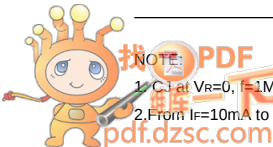
Case: SOD-123, Plastic
Terminals: Solderable per MIL-STD-202, Method 208
Approx. Weight:0.01 gram



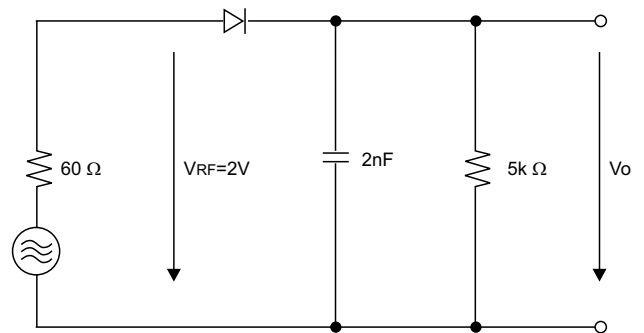
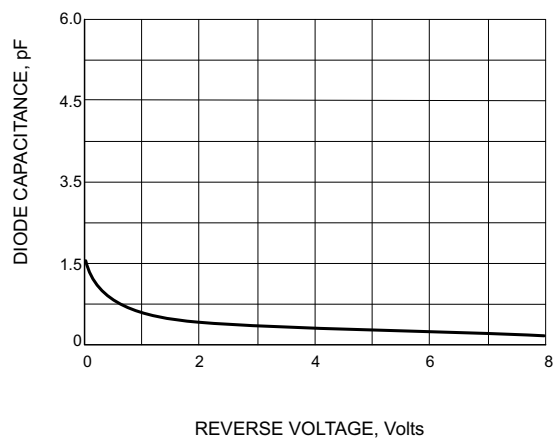
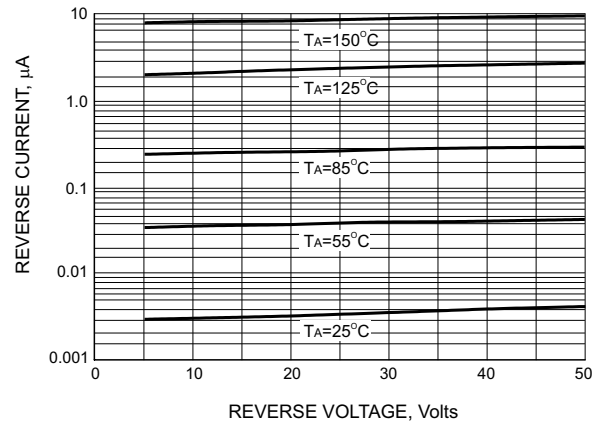
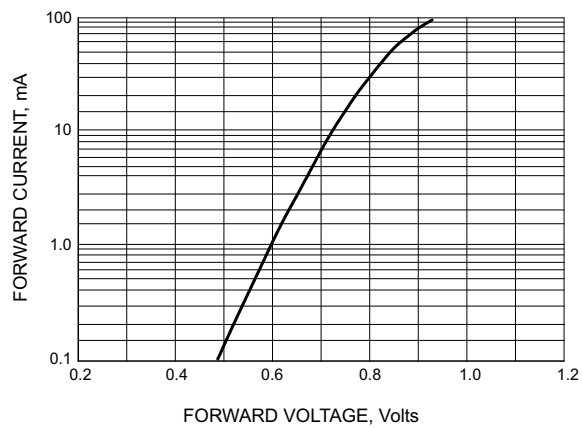
MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

PARAMETER	SYMBOL	CDSW4148	CDSW4448	UNITS
Reverse Voltage	V_R	75	75	V
Peak Reverse Voltage	V_{RM}	100	100	V
Maximum RMS Voltage	V_{RMS}	50	50	V
Maximum DC Blocking Voltage	V_{DC}	75	75	V
Maximum Average Forward Current at $T_a=25^{\circ}C$	I_{AV}	150	150	mA
Peak Forward Surge Current, 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	2.0	4.0	A
Power Dissipation Derate Above $25^{\circ}C$	P_{TOT}	410	500	mW
Maximum Forward Voltage	V_F	1.0 -	1.0 0.72	V
Maximum DC Reverse Current at Rated DC Blocking Voltage $T_J=25^{\circ}C$	I_R	2.5	2.5	μA
Typical Junction Capacitance(Notes1)	C_J	4.0	4.0	pF
Maximum Reverse Recovery (Notes2)	T_{RR}	4.0	4.0	ns
Maximum Thermal Resistance	$R_{\theta JA}$	450	450	$^{\circ}C/W$
Storage Temperature Range	T_J	-55 TO +125		$^{\circ}C$

NOTE:
1. C_J at $V_R=0$, $f=1MHz$
2. From $I_F=10mA$ to $I_R=1mA$, $V_R=6Volts$, $R_L=100\Omega$



RATING AND CHARACTERISTIC CURVES (CDSW4148, CDSW4448)



RECTIFICATION EFFICIENCY MEASUREMENT CIRCUIT