

SCHOTTKY BARRIER DIODE

SD101AW THRU SD101CW

VOLTAGE RANGE CURRENT 40 To 60 Volts 15 mA

FEATURES

- Fast Switching speed
- Low forward voltage
- Low capacitance
- Guard ring for transient and ESD protection
- Also available in the DO-35 package as SD101A and Mini-MELF as LL101A

MECHANICAL DATA

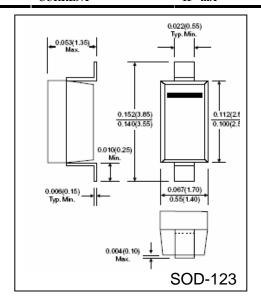
• Case: SOD-123 Plastic

• Terminals: solderable per MIL-STD-202

Method 208

Polarity: Color band denotes cathode end

• Weight: 0.00035 ounce, 0.01 gram



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

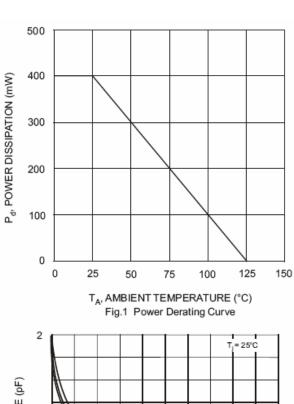
• Ratings at 25°C ambient temperature unless otherwise specified

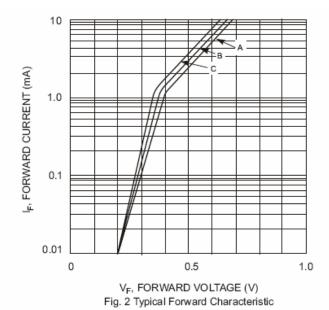
	SYMBOLS	SD101CW	SD101BW	SD101CW	UNIT
Repetitive Peak Reverse Voltage	V_{RRM}	60	50	40	Volt
Continuous Reverse Voltage	V_R	60	50	40	Volt
RMS Reverse Voltage	V_{rms}	42	35	28	Volt
Forward Continuous Current (Note 1)	I_{FM}		15		
Non-Repetitive Peak Forward Surge Current @ $T = 1.0 \mu S$ $T = 1.0 S$	I_{FSM}		50 2.0		
Peak Forward Surge Current@ $T_P < 1$ Sec, $T_A = 25^{\circ}C$	I_{FSM}		150		
Maximum Forward Voltage @ 1.0mA 15mA	V_{F}	0.41 1.0	0.4 0.95	0.39 0.90	Volts
Maximum Leakage Current, @ $T_J = 25^{\circ}$	I_R	200 @V _F =50V	200 @V _F =40V	200 @V _F =30V	nA
Maximum Reverse Recovery Time $I_F = 10mA, \ I_R = 10mA, \ I_R = 1mA, \ R_L = 100\Omega$	t _{rr}		1		
Power dissipation (Note 1)	P_{TOT}		400		
Typical Junction Capacitance , $V_F = 1V$, $f = 1MHz$	C_{J}	2.0	2.1	2.2	pF
Typical Thermal Resistance	$R_{ heta JA}$		300		
Operating Junction Temperature Range	T_{J}		(-55 to +150)		
Storage Temperature Range	T_{STG}		(-55 to +150)		

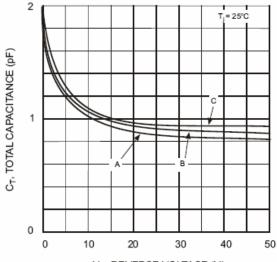
Notes:

1. Valid provided terminals are kept at ambient

RATINGS AND CHARACTERISTIC CURVES SD101AWTHRU SD101CW







V_R, REVERSE VOLTAGE (V)
Fig. 3 Typ. Total Capacitance vs Reverse Voltage