

Features

- Halogen Free. "Green" Device (Note 1)
- AEC-Q101 Qualified
- Low Forward Voltage Drop
- For General Purpose Applications
- Epoxy Meets UL 94 V-0 Flammability Rating
- Moisture Sensitivity Level 1
- Lead Free Finish/RoHS Compliant ("P" Suffix Designates RoHS Compliant. See Ordering Information)

Maximum Ratings

- Operating Junction Temperature Range: -55°C to +125°C
- Storage Temperature Range: -55°C to +150°C
- Thermal Resistance: 250°C/W Junction to Ambient(Note 2)

MCC Part Number	Repetitive Peak Reverse Voltage V_{RRM}	RMS Reverse Voltage $V_{R(RMS)}$	DC Blocking Voltage V_R
SD101AWHE3	60V	42V	60V
SD101BWHE3	50V	35V	50V
SD101CWHE3	40V	28V	40V

Electrical Characteristics @ 25°C Unless Otherwise Specified

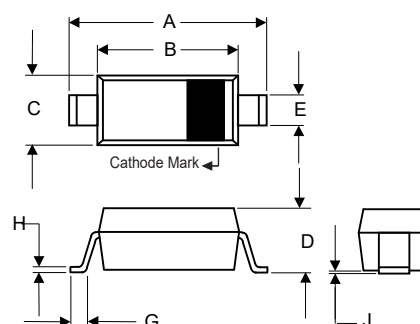
Average Forward Current	$I_{F(AV)}$	15mA	(Note 2)
Peak Forward Surge Current	I_{FSM}	2A	$t=8.3s$
Power Dissipation	P_d	400mW	

Note: 1. Halogen free "Green" products are defined as those which contain <900ppm bromine, <900ppm chlorine (<1500ppm total Br + Cl) and <1000ppm antimony compounds.

Note: 2. Mounted on FR-4 board with recommended pad layout.

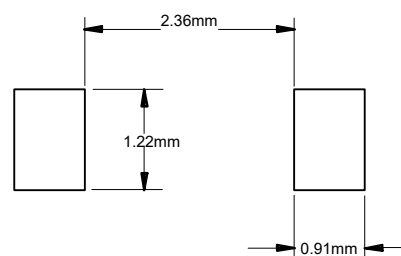
400mW Small Signal Schottky Diode 40 to 60 Volts

SOD-123

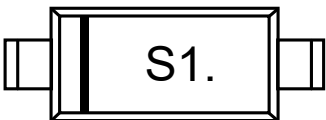
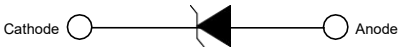


DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.140	0.152	3.55	3.85	
B	0.100	0.112	2.55	2.85	
C	0.055	0.071	1.40	1.80	
D	----	0.053	----	1.35	
E	0.018	0.026	0.45	0.65	
G	0.006	----	0.15	----	
H	----	0.010	----	0.25	
J	----	0.006	----	0.15	

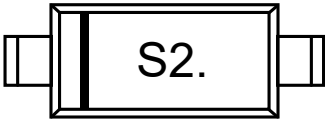
Suggested Solder Pad Layout



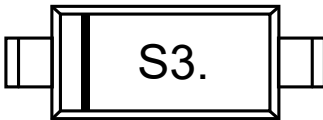
Internal Structure and Marking Code



SD101AWHE3



SD101BWHE3



SD101CWHE3

Electrical Characteristics @ 25° C Unless OtherwiseSpecified

SD101AWHE3

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Units
Reverse Breakdown Voltage	V_{BR}	$I_R=100\mu A$	60			V
Forward Voltage	V_F	$I_F=1mA$			0.41	V
		$I_F=15mA$			1.00	V
Reverse Current	I_R	$V_R=50V$			200	nA
Junction Capacitance	C_J	$V_R = 0V, f = 1MHz$			4	pF
Reverse Recovery Time	t_{rr}	$I_F=I_R=10mA,$ $I_{rr}=1mA,R_L=100\Omega$			3	ns

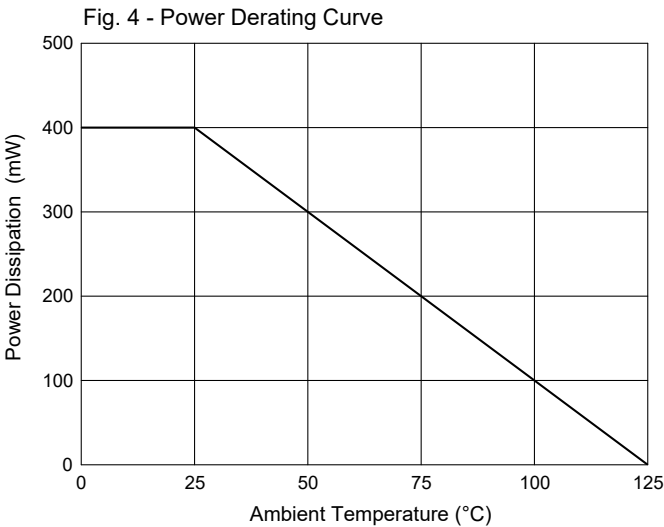
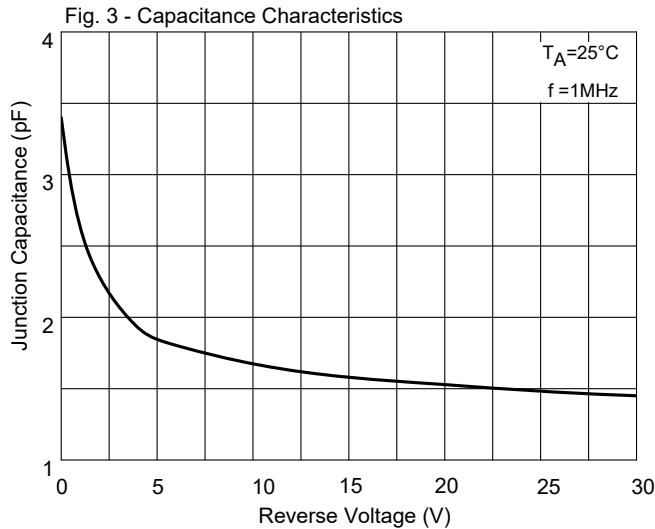
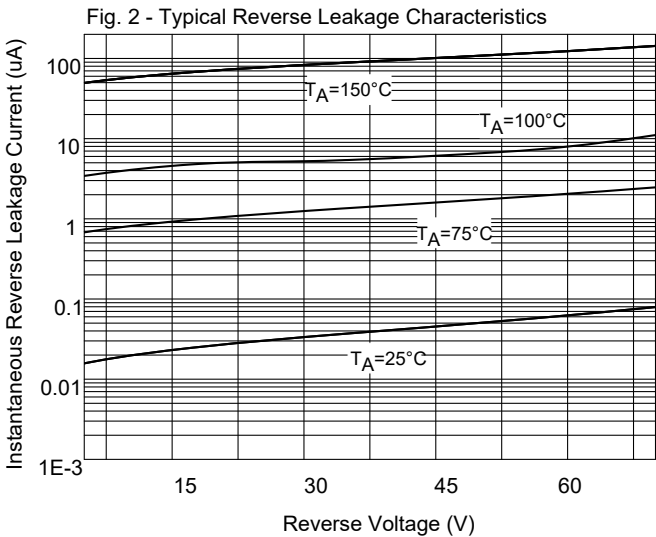
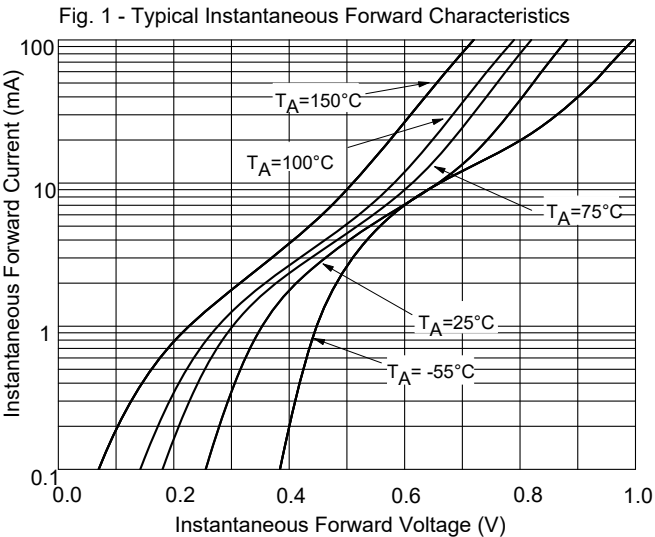
SD101BWHE3

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Units
Reverse Breakdown Voltage	V_{BR}	$I_R=100\mu A$	50			V
Forward Voltage	V_F	$I_F=1mA$			0.40	V
		$I_F=15mA$			0.95	V
Reverse Current	I_R	$V_R=40V$			200	nA
Junction Capacitance	C_J	$V_R = 0V, f = 1MHz$			4	pF
Reverse Recovery Time	t_{rr}	$I_F=I_R=10mA,$ $I_{rr}=1mA,R_L=100\Omega$			3	ns

SD101CWHE3

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Units
Reverse Breakdown Voltage	V_{BR}	$I_R=100\mu A$	40			V
Forward Voltage	V_F	$I_F=1mA$			0.39	V
		$I_F=15mA$			0.90	V
Reverse Current	I_R	$V_R=30V$			200	nA
Junction Capacitance	C_J	$V_R = 0V, f = 1MHz$			4	pF
Reverse Recovery Time	t_{rr}	$I_F=I_R=10mA,$ $I_{rr}=1mA, R_L=100\Omega$			3	ns

Curve Characteristics



Ordering Information

Device	Packing
Part Number-TP	Tape&Reel: 3Kpcs/Reel

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