

ES1JFL

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

Symbol	Characteristic	Value	Unit
$R_{\theta JA}$	Typical Thermal Resistance, Junction-to-Ambient (Note 1)	200	$^\circ\text{C/W}$
$R_{\theta JC}$	Typical Thermal Resistance, Junction-to-Case (Note 2)	30	$^\circ\text{C/W}$

1. Mounted on an FR4 PCB, single-sided copper, mini pad.
2. Mounted on an FR4 PCB, single-sided copper, with 10 cm x 10 cm copper pad area.

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

Symbol	Parameter	Conditions	Min	Typ	Max	Unit
V_F	Forward Voltage	$I_F = 1\text{ A}$	–	–	1.7	V
I_R	Reverse Current	$V_R = 600\text{ V}$	–	–	0.5	μA
		$V_R = 600\text{ V}, T_A = 100^\circ\text{C}$	–	–	10	
C_J	Capacitance	$V_R = 4\text{ V}, f = 1.0\text{ MHz}$	–	7	–	pF
T_{rr}	Reverse Recovery Time	$I_F = 0.5\text{ A}, I_R = 1\text{ A}, I_{rr} = 0.25\text{ A}$	–	22.55	35.00	ns

Product parametric performance is indicated in the Electrical Characteristics for the listed test conditions, unless otherwise noted. Product performance may not be indicated by the Electrical Characteristics if operated under different conditions.

ORDERING INFORMATION

Part Number	Top Mark	Package	Shipping [†]
ES1JFL	E1J	SOD-123F (Pb-Free/Halogen Free)	3000 / Tape & Reel

[†]For information on tape and reel specifications, including part orientation and tape sizes, please refer to our Tape and Reel Packaging Specifications Brochure, BRD8011/D.

TYPICAL PERFORMANCE CHARACTERISTICS

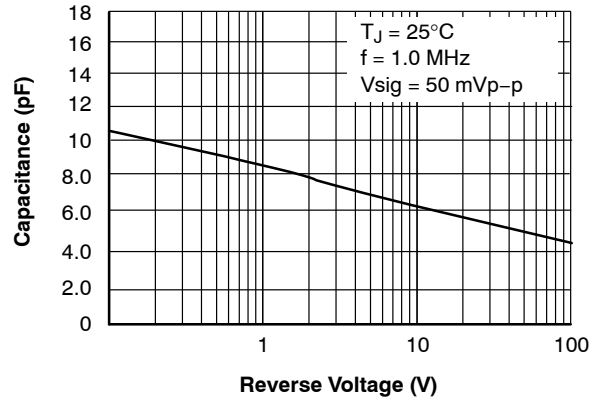


Figure 1. Typical Junction Capacitance

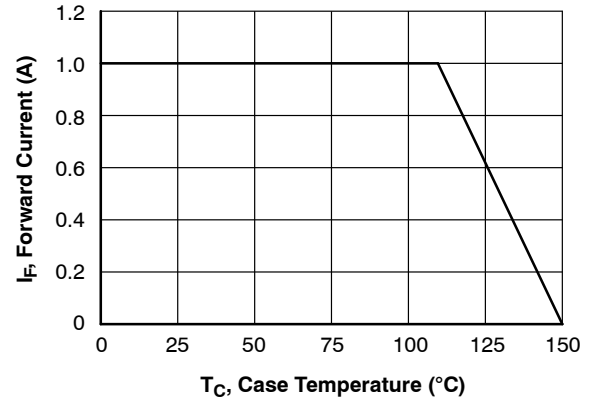


Figure 2. Forward Current Derating Curve

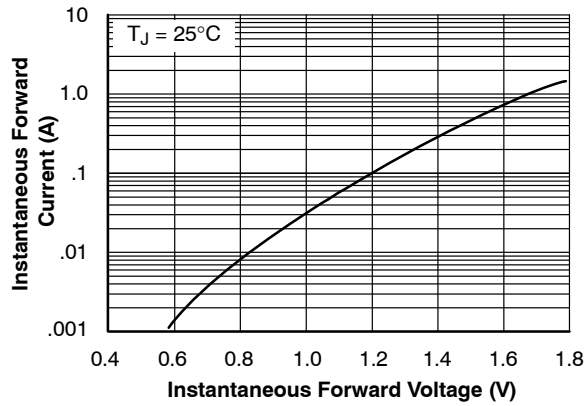


Figure 3. Typical Forward Characteristics

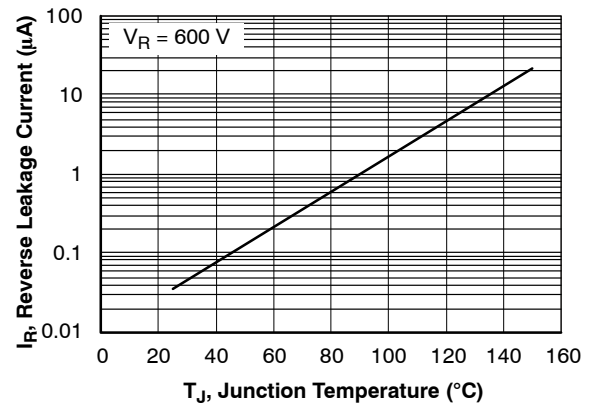
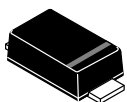


Figure 4. Typical Leakage Current vs. Junction Temperature



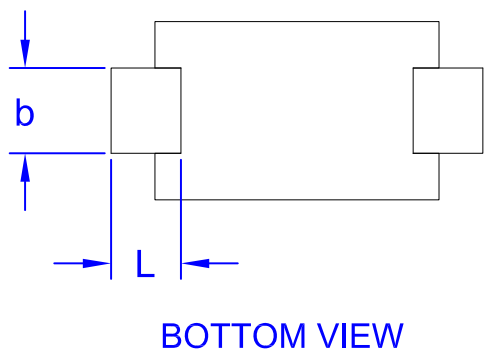
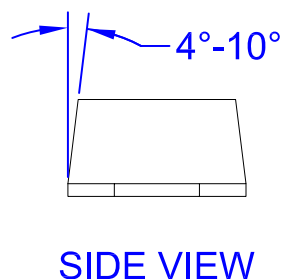
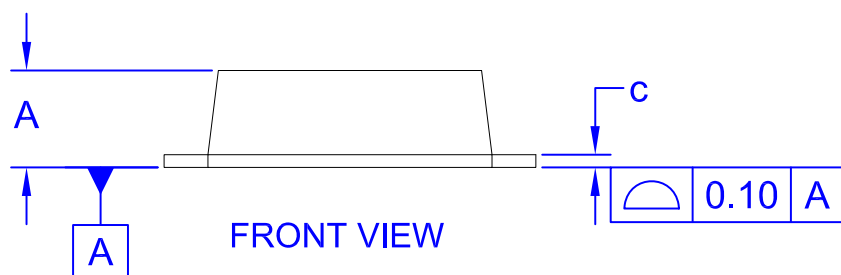
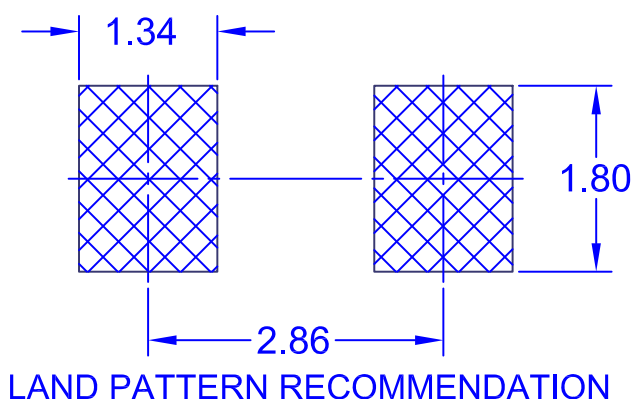
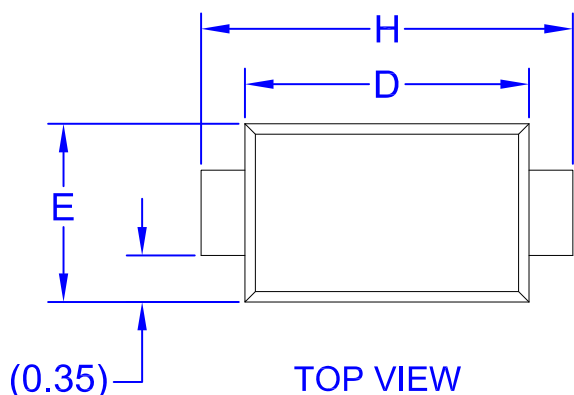
SCALE 4:1

SOD-123FL
CASE 425AD
ISSUE A

DATE 04 AUG 2017

NOTES:

- A. NO INDUSTRY STANDARD APPLIES TO THIS PACKAGE
- B. ALL DIMENSIONS ARE IN MILLIMETERS
- C. DIMENSIONS ARE EXCLUSIVE OF BURRS, MOLD FLASH AND TIE BAR PROTRUSIONS.




DIM	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.031	0.043	0.80	1.08
b	0.020	0.045	0.50	1.15
c	0.002	0.008	0.05	0.20
D	0.098	0.118	2.50	3.00
E	0.059	0.077	1.50	1.95
H	0.130	0.154	3.30	3.90
L	0.018	0.035	0.45	0.90

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DESCRIPTION:	SOD-123FL	PAGE 1 OF 2

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