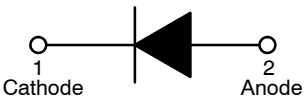
Surface Mount Schottky Barrier Rectifier

SS24FL, SS26FL



Schottky Barrier Rectifier



SOD−123F
CASE 425AD

Features

- Ultra Thin Profile − Maximum Height of 1.08 mm
- UL Flammability 94V−0 Classification
- MSL 1
- Green Mold Compound
- These Devices are Pb−Free, Halogen Free Free and are RoHS Compliant

Specifications

ABSOLUTE MAXIMUM RATINGS (T_A = 25°C unless otherwise noted)

Symbol	Parameter	Value		Unit
		SS24FL	SS26FL	
V_{RRM}	Peak Reverse Voltage	40	60	V
V_R	Reverse Voltage	40	60	V
$I_{F(AV)}$	Average Rectified Current at T_A = 75°C	2.0		A
I_{FSM}	Non−Repetitive Peak Forward Surge Current at t = 8.3 ms	50		A
T_J	Operating Junction Temperature Range	−55 to +125		°C
T_{STG}	Storage Temperature Range	−55 to +125		°C

Stresses exceeding those listed in the Maximum Ratings table may damage the device. If any of these limits are exceeded, device functionality should not be assumed, damage may occur and reliability may be affected.

MARKING DIAGRAMS



Band Indicates Cathode

&Y = Binary Calendar Year Coding Scheme
&Z = Assembly Plant Code
GP = Specific Device Code
&G = Single Digit Weekly Data Code



Band Indicates Cathode

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GQ = Specific Device Code
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ORDERING INFORMATION

See detailed ordering and shipping information on page 2 of this data sheet.

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THERMAL CHARACTERISTICS (T_A = 25°C unless otherwise noted)

Symbol	Characteristic	Value	Unit
$R_{\theta JA}$	Typical Thermal Resistance, Junction−to−Ambient (Note 1)	140	°C/W

1. Mounted with minimum recommended pad size, PC board FR4.

ELECTRICAL CHARACTERISTICS (T_A = 25°C unless otherwise noted)

Symbol	Parameter	Conditions		Min	Typ	Max	Unit
BV_R	Reverse Breakdown Voltage	I_R = 500 μA	SS24FL	40	–	–	V
			SS26FL	60	–	–	
V_F	Forward Voltage	I_F = 2.0 A	SS24FL	–	–	0.55	V
			SS26FL	–	–	0.70	
I_R	Reverse Leakage Current	$V_R = V_{RRM}$	SS24FL	–	–	100	μA
			SS26FL	–	–	40	
T_{rr}	Reverse Recovery Time	I_F = 0.5 A, I_R = 1 A, I_{rr} = 0.25 A	SS24FL	–	9.495	–	ns
			SS26FL	–	8.260	–	

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†
SS24FL	GP	SOD−123F (Pb−Free/Halogen Free)	3000 / Tape & Reel
SS26FL	GQ	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

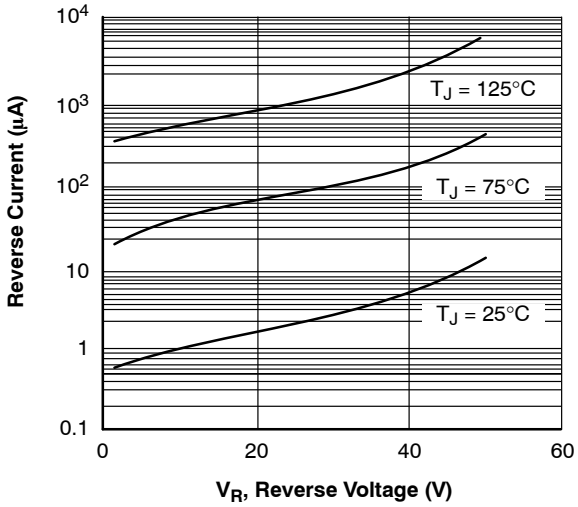


Figure 1. Typical Reverse Characteristics

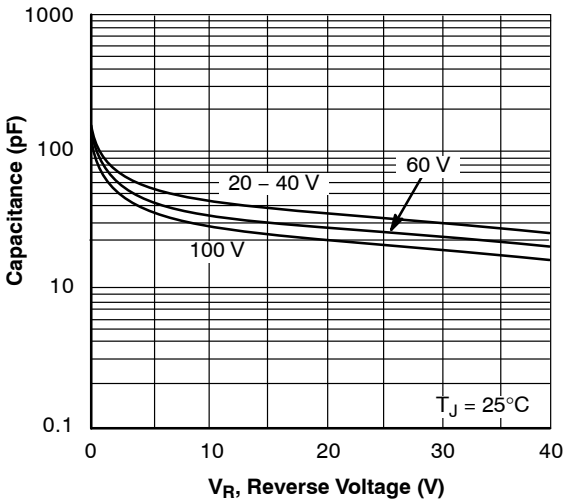


Figure 2. Typical Junction Characteristics

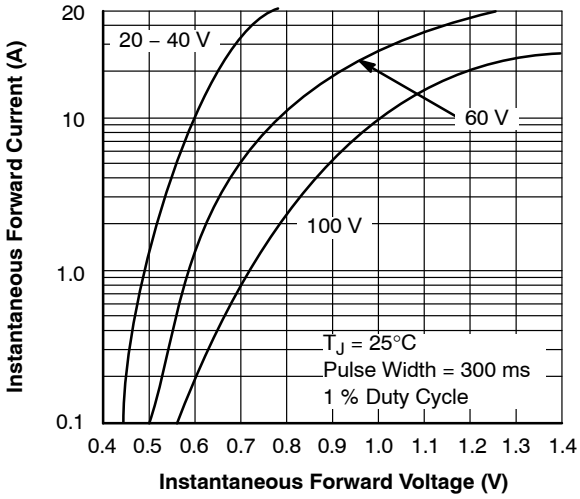
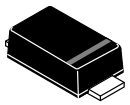


Figure 3. Typical Instantaneous Forward Characteristics

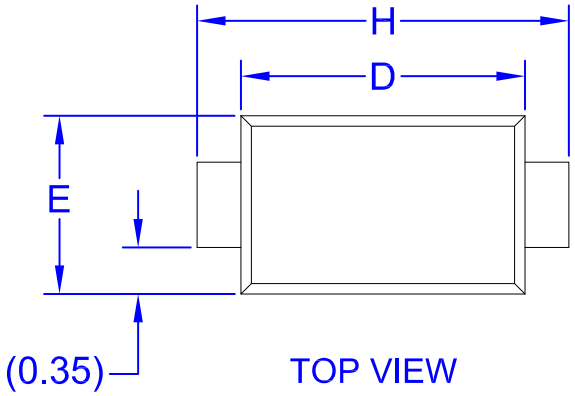


SCALE 4:1

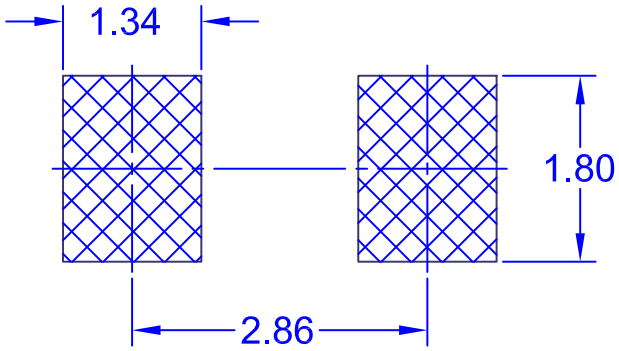
SOD−123FL
CASE 425AD
ISSUE A

DATE 04 AUG 2017

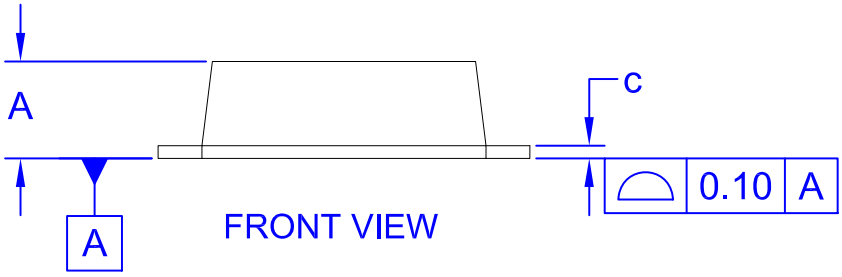
NOTES:
A. NO INDUSTRY STANDARD APPLIES TO THIS PACKAGE
B. ALL DIMENSIONS ARE IN MILLIMETERS
C. DIMENSIONS ARE EXCLUSIVE OF BURRS, MOLD FLASH AND TIE BAR PROTRUSIONS.



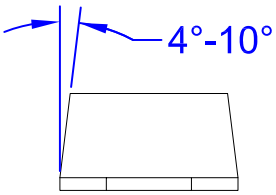
TOP VIEW



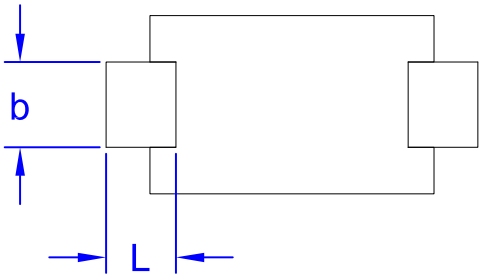
LAND PATTERN RECOMMENDATION



FRONT VIEW



SIDE VIEW



BOTTOM VIEW

	INCHES		MILLIMETERS	
DIM	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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