

### Features

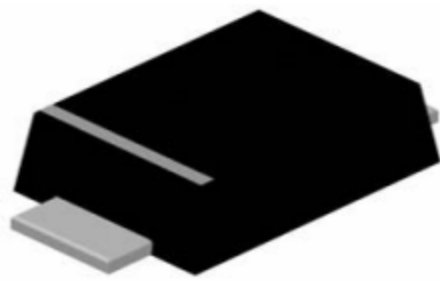
- Fast switching speed
- Surface mount package ideally suited for automatic insertion
- Low power loss, high efficiency
- Lead free in compliance with EU RoHS 2.0
- Green molding compound as per IEC 61249 standard

### Mechanical Data

- Case: SOD-123FL, Plastic
- Terminals: Solderable per MIL-STD-750, Method 2026
- Approx. Weight: 0.0006 ounces, 0.0173 grams
- Polarity: Color band denotes cathode end
- Marking: RD

### Dimensions and Pin Configuration

#### SOD123FL



Marking:RD

### Maximum Ratings & Thermal Characteristics

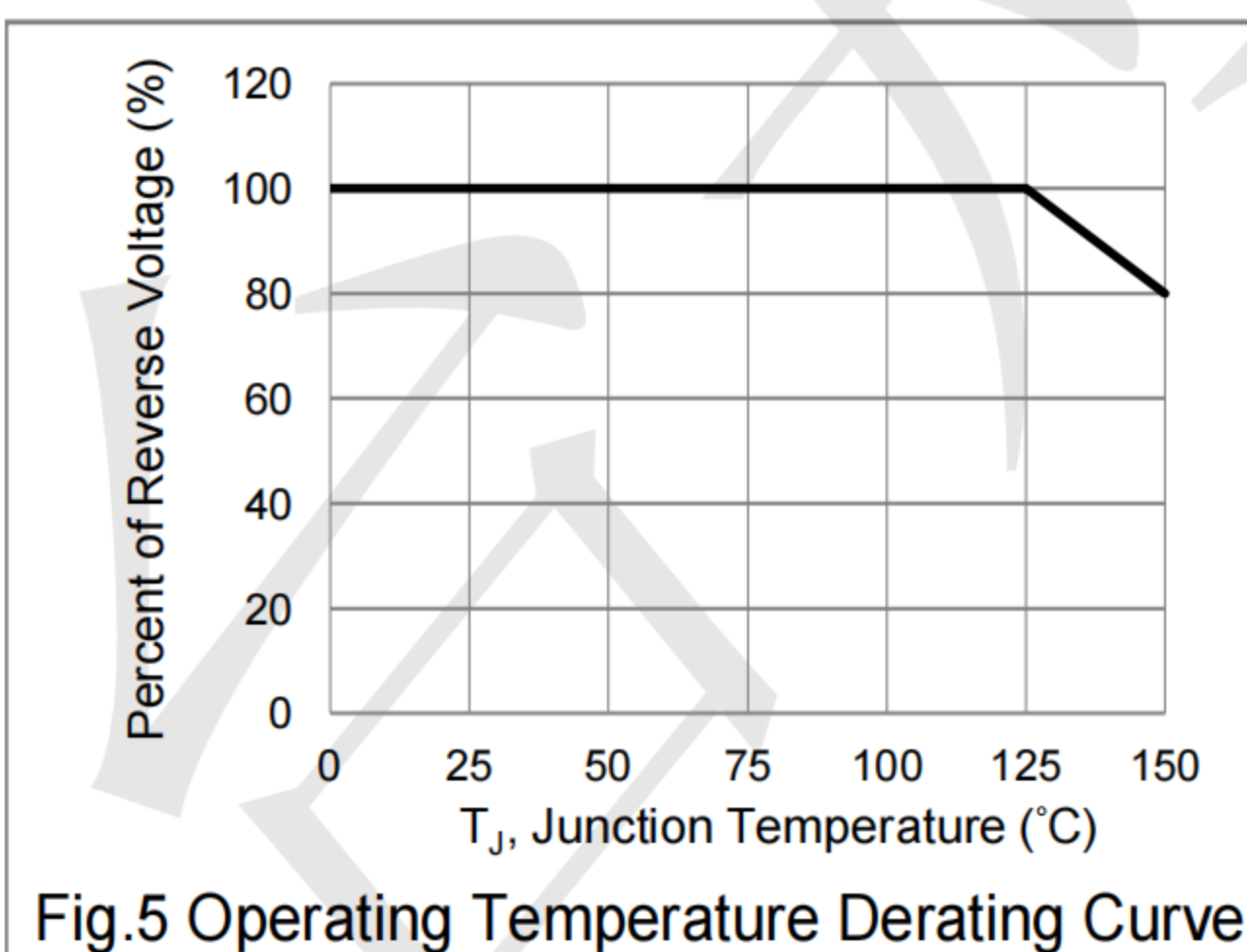
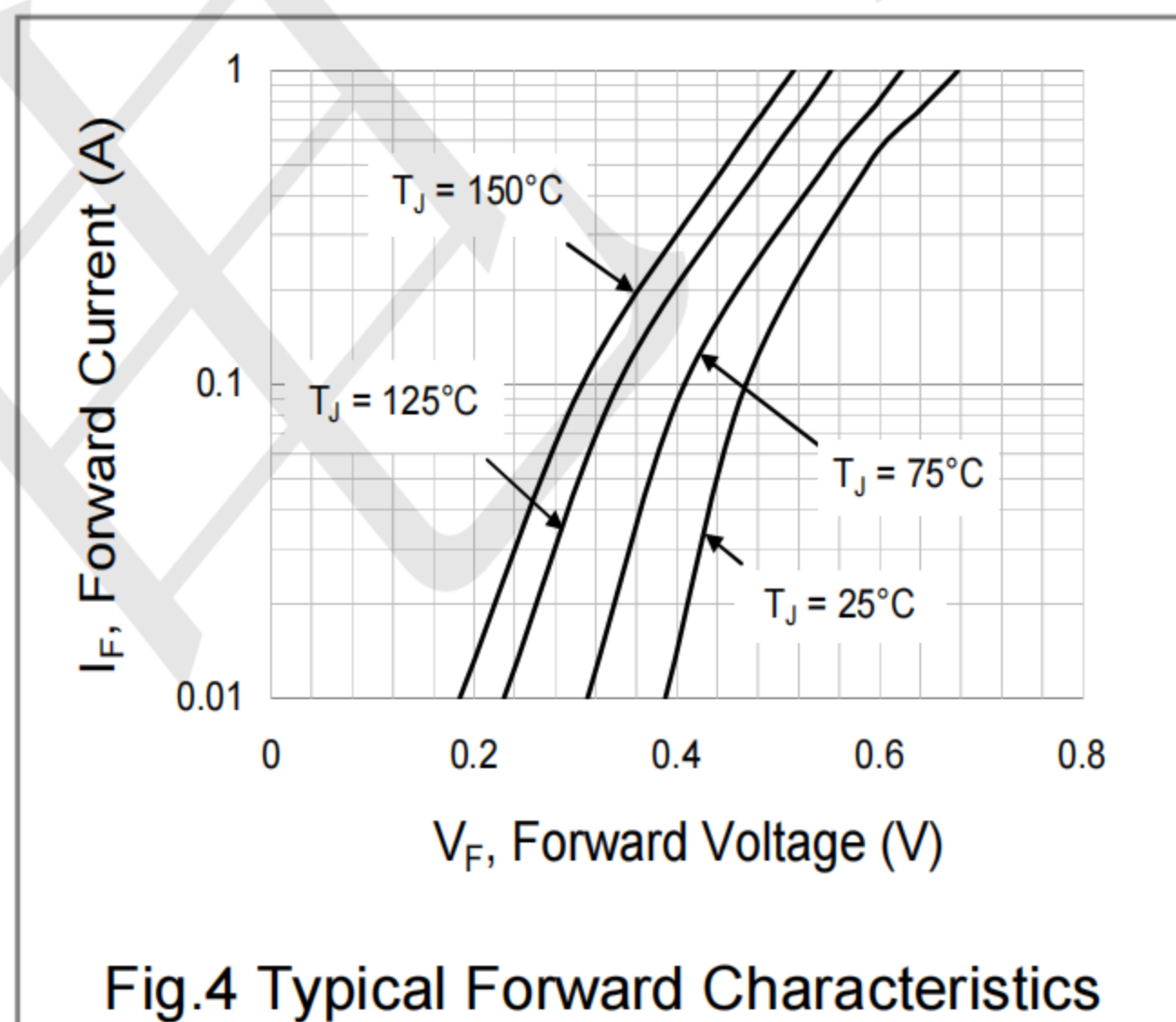
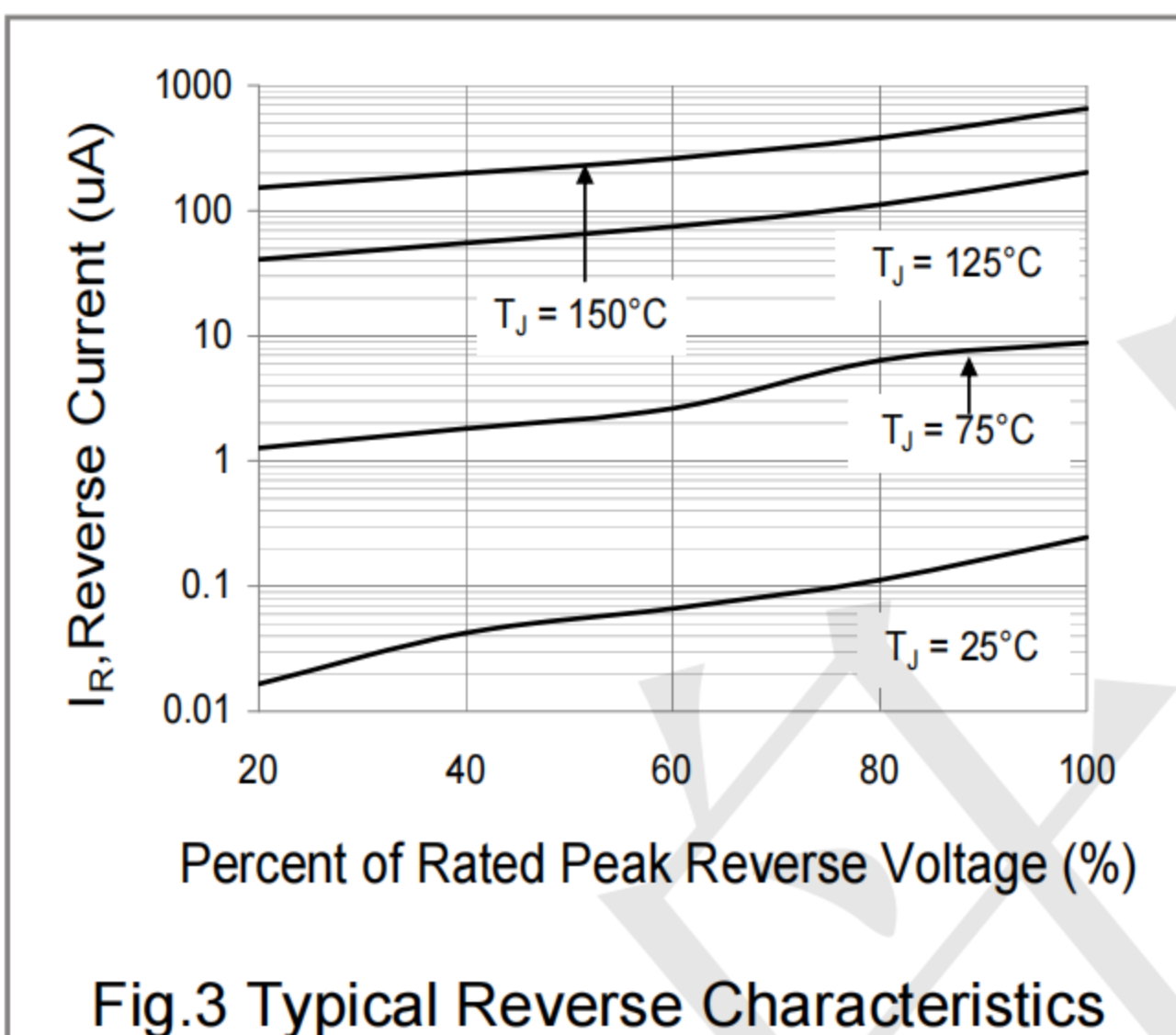
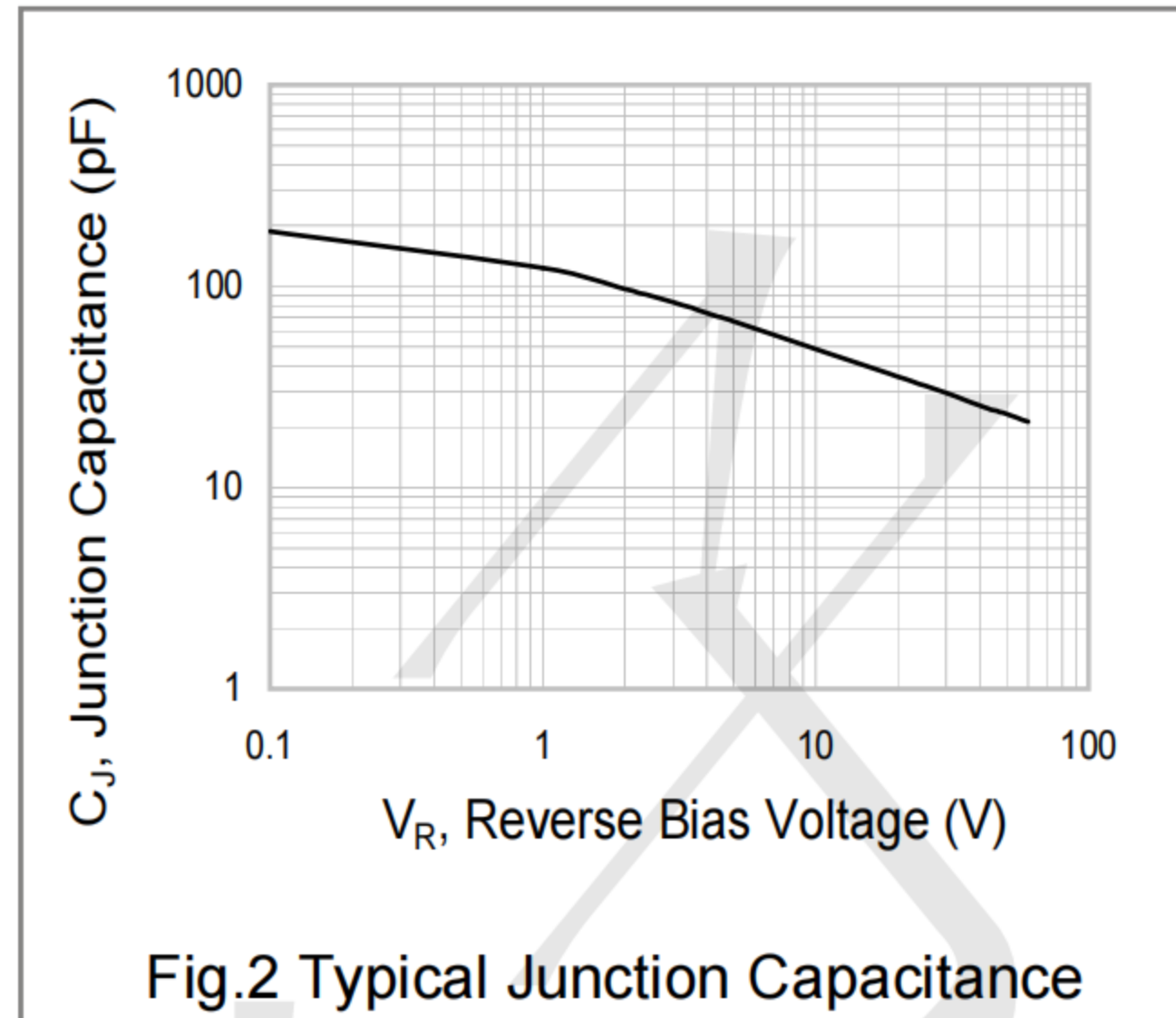
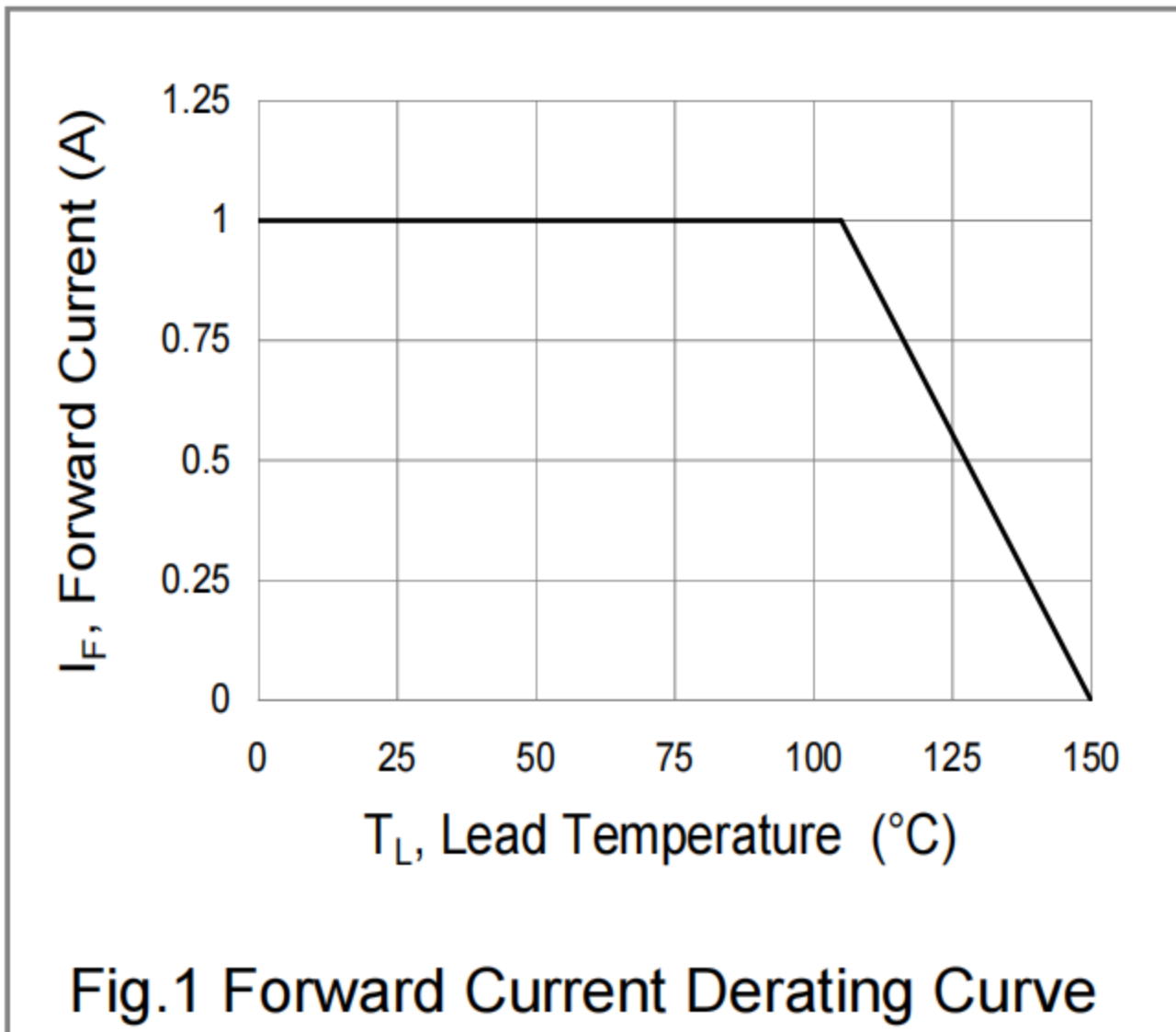
(Ratings at 25°C ambient temperature unless otherwise specified.)

PARAMETER	SYMBOL	VALUE	UNITS
Reverse Voltage	$V_R$	90	V
Peak Reverse Voltage	$V_{RRM}$	90	V
Average Rectified Current	$I_O$	1	A
Peak Forward Surge Current:8.3ms single half sine-wave superimposed on rated load	$I_{FSM}$	50	A
Typical Thermal Resistance, Junction to Ambient (Note 1)	$R_{\theta JA}$	180	°C/W
Operating Junction Temperature and Storage Temperature Range	$T_J, T_{STG}$	-55 to +150	°C

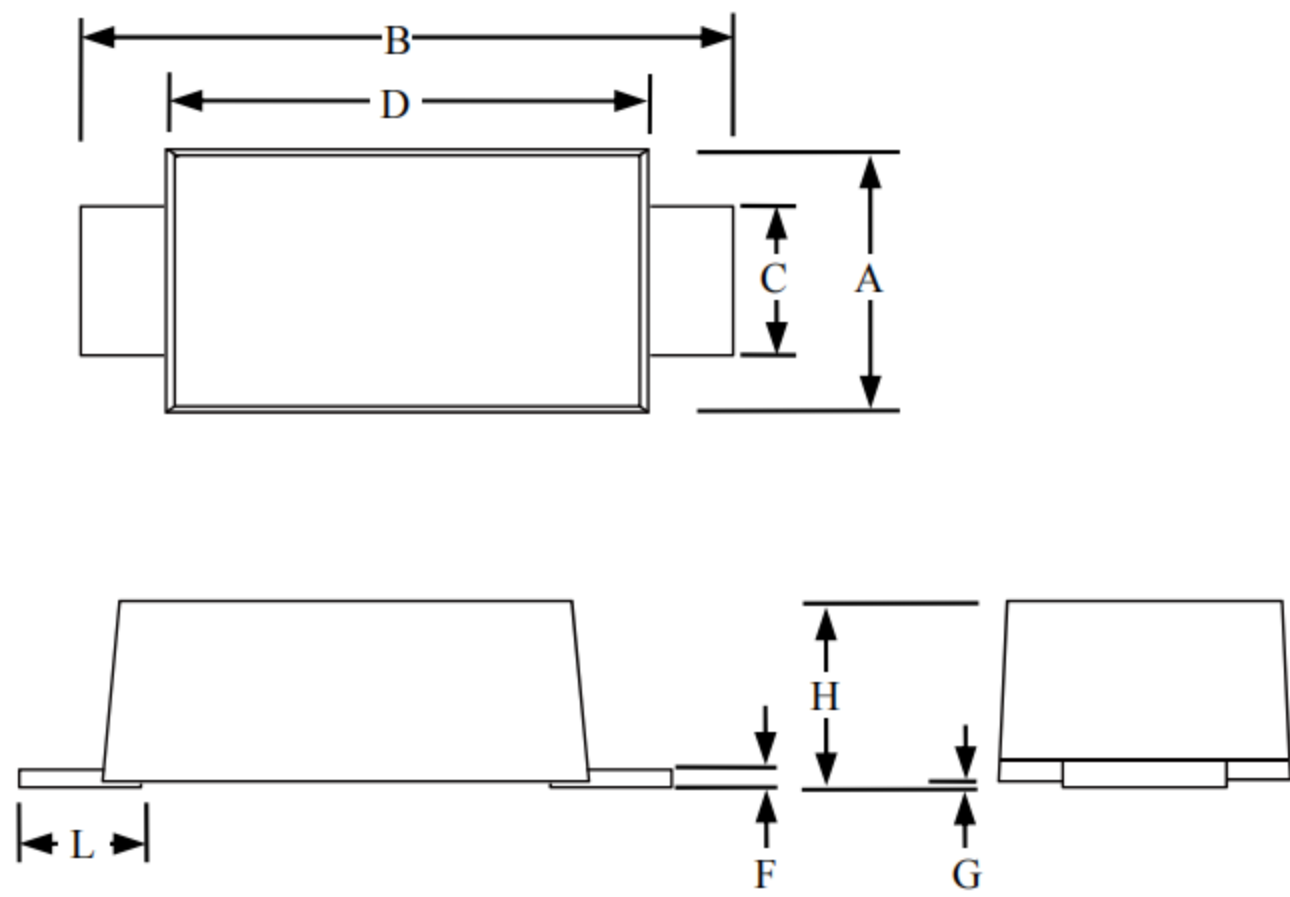
### Electrical Characteristics (Ratings at 25°C ambient temperature unless otherwise specified).

PARAMETER	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNITS
Reverse Breakdown Voltage	$V_{(BR)}$	$I_R=1mA$	90			V
Reverse Current	$I_R$	$V_R=100V$	-	-	100	μA
Forward Voltage	$V_F$	$I_F=1.0A$	-	0.68	0.75	V
Typical Junction Capacitance	$C_J$	$V_R=0V, f=1.0MHz$	-	203	-	pF

**Typical Performance Characteristics (TA=25°C unless otherwise Specified)**



**Package Outline Dimensions: SOD123FL**



SOD-123FL						
Dimension	Inches			Millimeters		
	MIN	NOM	MAX	MIN	NOM	MAX
A	0.059		0.079	1.5		2
B	0.134		0.154	3.4		3.9
C	0.028		0.047	0.7		1.2
D	0.098		0.114	2.5		2.9
F	0.002		0.01	0.05		0.26
G	-		0.004	-		0.1
H	0.037		0.053	0.95		1.35
L	0.014		0.035	0.35		0.9