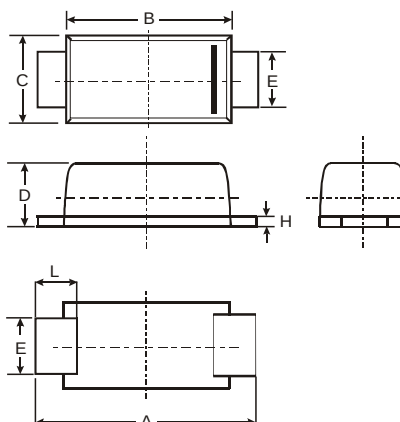


### Features

- High reliability
- Low forward voltage and reverse current

### Mechanical Data

- Case: SOD-123FL  
plastic body over passivated junction
- Terminals: Plated axial leads,
- solderable per MIL-STD-750, Method 2026
- Polarity: Color band denotes cathode end
- Weight: 0.0007 ounce, 0.02 grams



| SOD-123FL            |      |      |      |
|----------------------|------|------|------|
| Dim                  | Min  | Max  | Typ  |
| A                    | 3.50 | 3.90 | 3.70 |
| B                    | 2.60 | 3.00 | 2.80 |
| C                    | 1.63 | 1.93 | 1.78 |
| D                    | 0.93 | 1.00 | 0.98 |
| E                    | 0.85 | 1.25 | 1.00 |
| H                    | 0.15 | 0.25 | 0.20 |
| L                    | 0.55 | 0.75 | 0.65 |
| All Dimensions in mm |      |      |      |

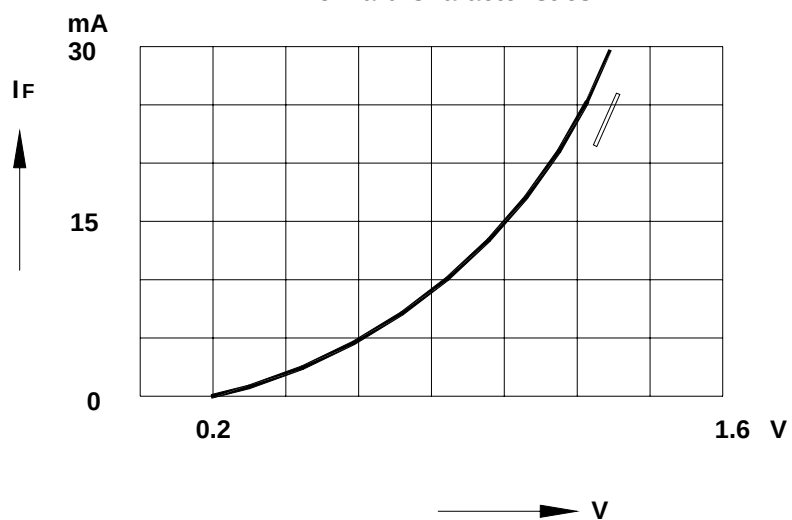
### Maximum Ratings @ $T_A = 25^\circ\text{C}$ unless otherwise specified

| Parameter                        | Symbol      | Value       | Unit             |
|----------------------------------|-------------|-------------|------------------|
| Peak Reverse Voltage             | $V_{RM}$    | 45          | V                |
| Reverse Voltage                  | $V_R$       | 10          | V                |
| Peak Forward Current             | $I_{FM}$    | 150         | mA               |
| Average Rectified Output Current | $I_O$       | 50          | mA               |
| Surge Forward Current            | $I_{surge}$ | 500         | mA               |
| Junction Temperature             | $T_j$       | 125         | $^\circ\text{C}$ |
| Storage Temperature Range        | $T_S$       | -55 to +125 | $^\circ\text{C}$ |

### Electrical Characteristics $T_A = 25^\circ\text{C}$ unless otherwise specified

| Parameter                                                                                                                | Symbol | Min. | Max.      | Unit          |
|--------------------------------------------------------------------------------------------------------------------------|--------|------|-----------|---------------|
| Forward Current<br>at $V_F = 1\text{ V}$                                                                                 | $I_F$  | 4    | -         | mA            |
| Reverse Current<br>at $V_R = 10\text{ V}$                                                                                | $I_R$  | -    | 50<br>100 | $\mu\text{A}$ |
| Reverse Voltage<br>at $I_R = 100\text{ }\mu\text{A}$                                                                     | $V_R$  | 45   | -         | V             |
| Junction Capacitance<br>at $f = 1\text{ MHz}$ , $V = -1\text{ V}$                                                        | $C_J$  | -    | 1         | pF            |
| Rectification efficiency<br>at $V_i = 2\text{ Vrms}$ , $R = 5\text{ K}\Omega$ , $C = 20\text{ pF}$ , $f = 40\text{ MHz}$ | $\eta$ | 55   | -         | %             |

**Forward Characteristics**



**Reverse Characteristics**

