

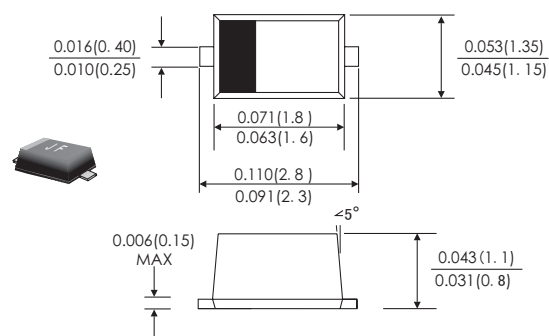
### FEATURES

- Silicon epitaxial planar diode
- Fast switching diode
- 200mW power dissipation
- This diode is also available in other case styles including: the DO-35 case with the type designation 1N4148, the MiniMelf case with the type designation LL4148, the MicroMelf case with the type designation MCL4148, the SOD-123FL case with the type designation 1N4148W, The SOD-523 case with the type designation 1N4148WT.

### MECHANICAL DATA

• Case: SOD-323FL plastic case

### SOD-323FL



Dimensions in inches and (millimeters)

### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

Parameter	Symbol	Value	Unit
Peak Reverse Voltage	$V_{RM}$	100	V
Reverse Voltage	$V_R$	75	V
Average Rectified Forward Current	$I_{F(AV)}$	150	mA
Surge Forward Current ( $t < 1$ s, $T_j = 25^\circ\text{C}$ )	$I_{FSM}$	350	mA
Power Dissipation	$P_{tot}$	200	mW
Thermal Resistance from Junction to Ambient Air	$R_{\theta JA}$	625	$^\circ\text{C}/\text{W}$
Junction Temperature	$T_j$	150	$^\circ\text{C}$
Storage Temperature Range	$T_{stg}$	- 65 to + 150	$^\circ\text{C}$

### ELECTRICAL CHARACTERISTICS

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

Parameter	Symbol	Max.	Unit
Forward Voltage at $I_F = 10$ mA	$V_F$	0.855	V
Reverse Current at $V_R = 20$ V at $V_R = 75$ V at $V_R = 20$ V, $T_j = 150^\circ\text{C}$	$I_R$	25 1 50	nA $\mu\text{A}$ $\mu\text{A}$
Total Capacitance at $V_R = 0$ V, $f = 1$ MHz	$C_{tot}$	4	pF
Reverse Recovery Time at $I_F = 10$ mA to $I_R = 1$ mA, $V_R = 6$ V, $R_L = 100 \Omega$	$t_{rr}$	4	ns

# RATINGS AND CHARACTERISTIC CURVES 1N4148WS

FIG 1-FORWARD CHARACTERISTICS

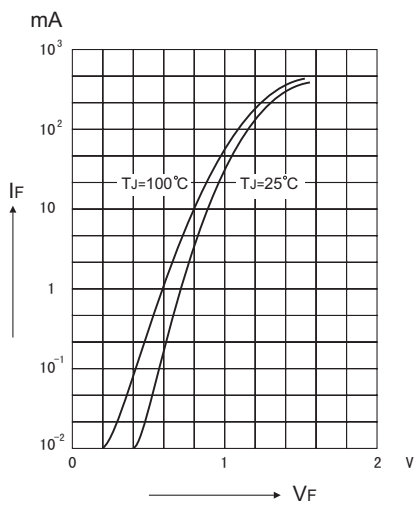


FIG 2: DYNAMIC FORWARD RESISTANCE VERSUS FORWARD CURRENT

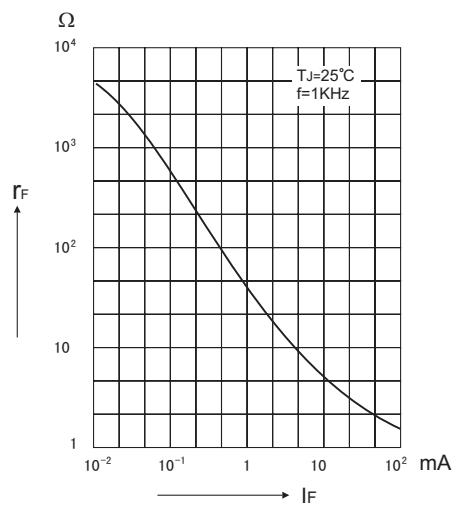


FIG. 3-RELATIVE CAPACITANCE VERSUS VOLTAGE

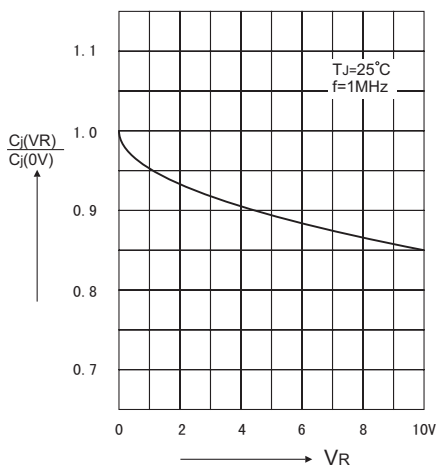


FIG 4: ADMISSIBLE REPETITIVE PEAK FORWARD CURRENT VERSUS PULSE DURATION

