



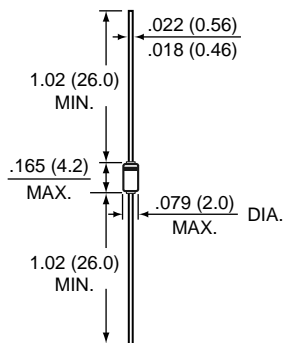
1N4148

SMALL-SIGNAL DIODE

Reverse Voltage 100 Volts

Peak Forward Current - 150mA

DO-35



*Dimensions in inches and (millimeters)



FEATURES

- * Silicon Epitaxial Planar Diode
- * Fast switching diode.

MECHANICAL DATA

Case : DO-35 Glass Case
Weight : approx. 0.13 gram

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

PARAMETER	SYMBOLS	VALUE	UNITS
Continuous Reverse Voltage	V _R	75	Vdc
Peak Reverse Voltage	V _{RM}	100	Vdc
Average Rectified Current Half Wave Rectification with Resistive Load at Tamb = 25°C	I _{F(AV)}	150	mAdc
Surge Forward Current at t < 1s and T _j = 25°C	I _{FSM}	500	mAdc
Power Dissipation at Tamb = 25°C ⁽¹⁾	P _{tot}	500	mW
Thermal Resistance Junction to Ambient Air ⁽¹⁾	R _{θJA}	350	°C / W
Junction Temperature	T _J	175	°C
Storage Temperature	T _{STG}	-65 to +175	°C

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

PARAMETER	TEST CONDITION	SYMBOL	MIN.	TYP.	MAX.	UNITS
Reverse Voltage Leakage Current	(V _R =20Vdc)	I _R	-	-	25	nAdc
	(V _R =75Vdc)		-	-	5	uAdc
	(V _R =20Vdc, T _J =150°C)		-	-	50	uAdc
Reverse Breakdown Voltage	(I _R =100uAdc)	V _(BR)	100	-	-	Vdc
Forward Voltage	(I _F =10mAdc)	V _F	-	-	1.0	Vdc
Junction Capacitance	(V _R =0, f=1.0MHz)	C _J	-	-	4	pF
Voltage Rise when Switching ON (tested with 50 mA Pulses)	(t _p =0.1us, Rise time < 30ns f _p =5 to 100 kHz)	V _{FR}	-	-	2.5	V
Reverse Recovery Time	(I _F =10mA, I _R =1mA, V _R =6V, R _L =100Ω)	t _{rr}	-	-	4	nS

RATINGS AND CHARACTERISTIC CURVES OF 1N4148

FIG.1 - FORWARD VOLTAGE VS. JUNCTION TEMPERATURE

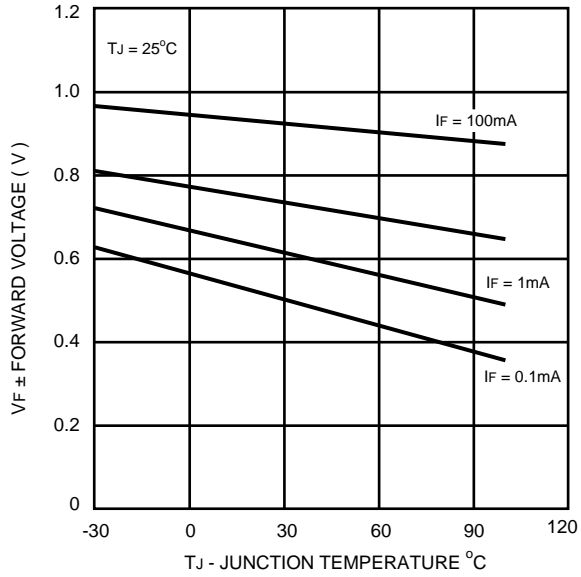


FIG.2 - FORWARD CURRENT VS. FORWARD VOLTAGE

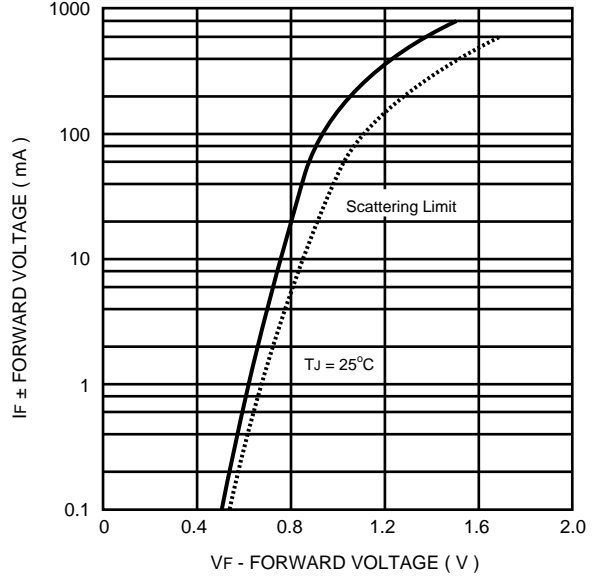


FIG.3 - REVERSE CURRENT VS. REVERSE VOLTAGE

