

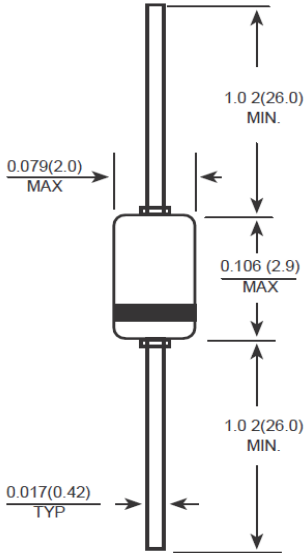


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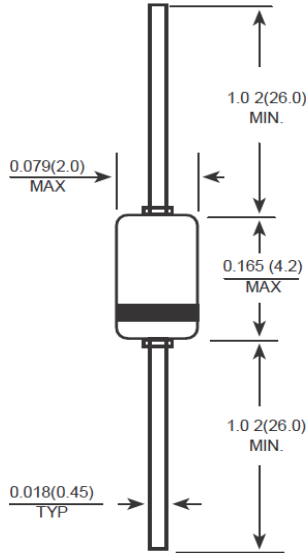
SMALL SIGNAL SWITCHING DIODE

Reverse Voltage - 100 Volts, Power 500mW

DO-34(GLASS)



DO-35(GLASS)



Dimensions in inches and (millimeters)

FEATURES

- ◆ Fast switching speed
- ◆ Silicon Epitaxial Planar Construction.
- ◆ 500mw power dissipation
- ◆ Pb free product : 99% Sn above can meet RoHS environment substance directive request

MECHANICAL DATA

Case: DO-34\DO-35 glass sealed envelope.

Terminals: Solderable per MIL-STD-750 Method 2026

Polarity: Color band denotes cathode end

Mounting Position: Any

Approx. Weight: 0.003 ounce, 0.09 grams(DO-34)
0.005 ounce, 0.14 grams(DO-35)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

Single phase half-wave 60Hz, resistive or inductive load, for capacitive load current derate by 20%.

PARAMETER	SYMBOLS	1N4448	UNITS
Peak Reverse Voltage	V_{RM}	100	Volts
Maximum DC Blocking Voltage	V_{DC}	75	Volts
Maximum Average Forward current at $T_A = 25^\circ\text{C}$ and $f \geq 50\text{Hz}$	$I_{(AV)}$	150	mA
Forward Surge Current at $t < 1\text{s}$ and $T_J = 25^\circ\text{C}$	I_{FSM}	500	mA
Power Dissipation $= 25^\circ\text{C}$	P_{TOT}	500	mW
Maximum Forward Voltage at $I_F = 100\text{mA}$	V_F	1.0	Volts
Maximum Leakage Current at $V_r = 20\text{V}$ at $V_R = 20\text{V}$, $T_J = 150^\circ\text{C}$	I_R	30 50	nA μA
Maximum Capacitance at $V_F = V_R = 0$	C_J	4	pF
Maximum Reverse Recovery Time From $I_F = -I_R = 10\text{mA}$ to $I_{RR} = -1\text{mA}$, $V_R = 6\text{V}$, $R_L = 100\Omega$	t_{rr}	4	nS
Typical Maximum Thermal Resistance	$R_{\theta JA}$	350	$^\circ\text{C/W}$
Junction Temperature and Storage Temperature Range	T_J, T_{STG}	-65 to +175	$^\circ\text{C}$

Note: 1. C_J at $V_R = 0$, $f = 1\text{MHz}$

2. From $I_F = 10\text{mA}$ to $I_R = 1\text{mA}$, $V_R = 6\text{Volts}$, $R_L = 100\Omega$



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RATINGS AND CHARACTERISTIC CURVES

FIG. 1- FORWARD VOLTAGE DERATING CURVE

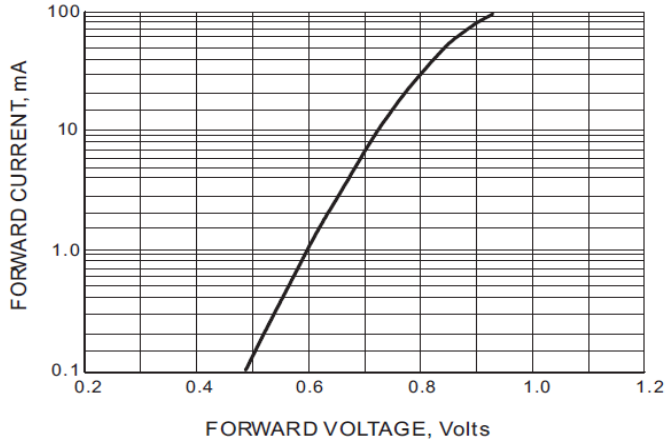


FIG. 2-LEAKAGE CURRENT

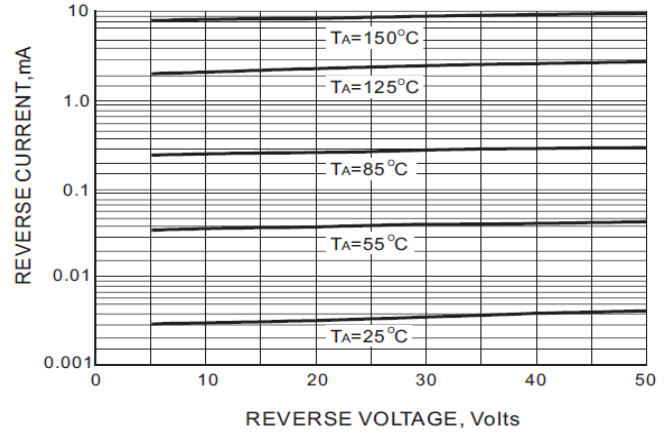
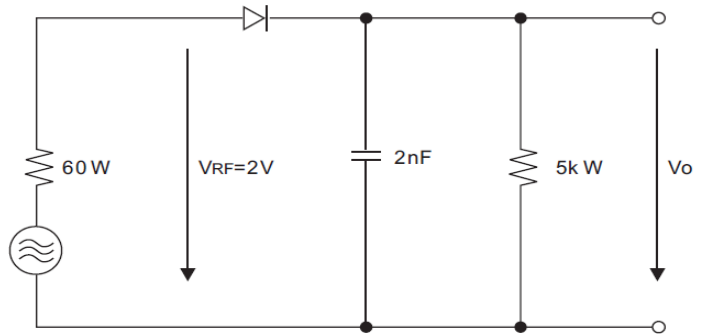
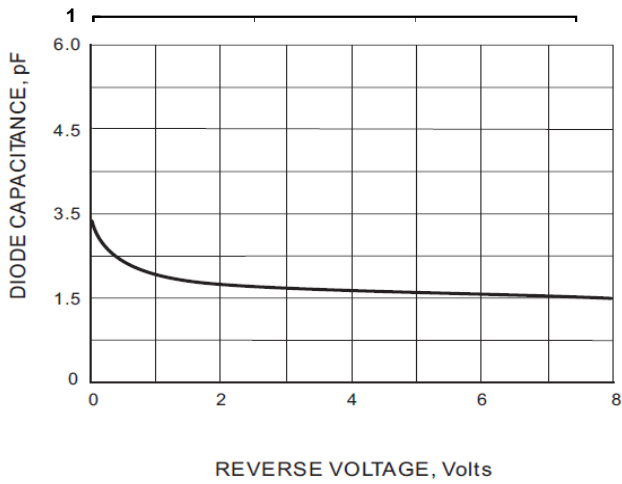


FIG. 3-TYPICALCAPATICANCE CHARACTERISTICS



RECTIFICATION EFFICIENCY MEASUREMENT CIRCUIT