



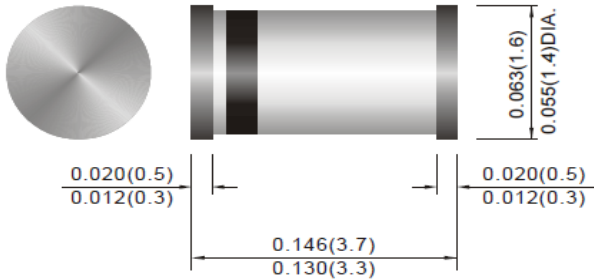
LL4448

Surface Mount Switching Diodes

Voltage 100 Volts, Power 500 mWatts

Mini-MELF/LL-34

FEATURES



- ◆ Fast switching speed
- ◆ Electrically identical to standard JEDEC
- ◆ Silicon Epitaxial Planar Construction.
- ◆ Surface mount package ideally suited for automatic insertion

MECHANICAL DATA

Case: Mini-MELF/LL-34, Glass

Terminals: Solderable per MIL-STD-750 · Method 2026

Approx. Weight: 0.03 grams(approx)

Marking codes : Cathode Band Only

Dimensions in inches and (millimeters)

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	VALUE	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 $f \leq 50\text{Hz}$	$I_{(AV)}$	150	Amps
Peak Forward Surge Current, $t < 1\text{s}$ and $T_J = 25^\circ\text{C}$	I_{FSM}	500	mA
Power Dissipation Derate Above 25°C	P_{TOT}	500	mW
Maximum Forward Voltage at $I_F = 100\text{mA}$	V_F	1.0	Volts
Maximum Leakage Current	I_R	30 50	nA μA
Maximum Junction Capacitance (Notes 1)	C_J	4	pF
Maximum Reverse Recovery Time (Notes 2)	t_{rr}	4	nS
Typical Maximum Thermal Resistance (NOTE 3)	$R_{\theta JA}$	350	°C/W
Junction Temperature and Storage Temperature Range	T_J, T_{STG}	-65 ~ +175	°C

Note: 1. C_J at Reverse Voltage = 0. $f=1\text{MHz}$

2. From $I_F=30\text{mA}$ to $I_R=-3\text{mA}$. $V_R=6\text{V}$. Load= 100Ω

3. Mounted with minimum recommended padsize · PCBoard FR4.



LL4448

RATINGS AND CHARACTERISTIC CURVES

FIG. 1- FORWARD DERATING CURVE

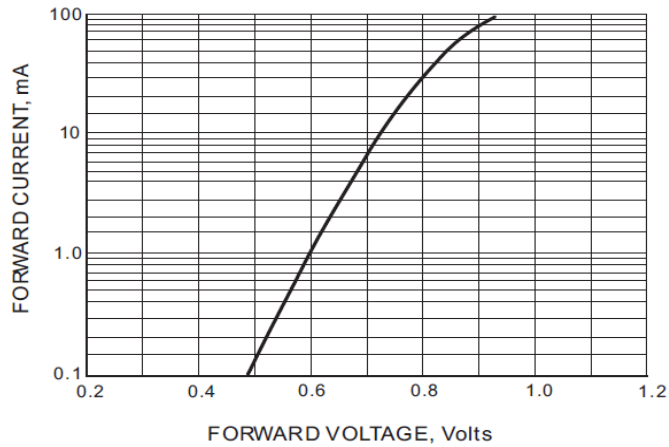


FIG. 2-TYPICAL LEAKAGE CURRENT RATINGS

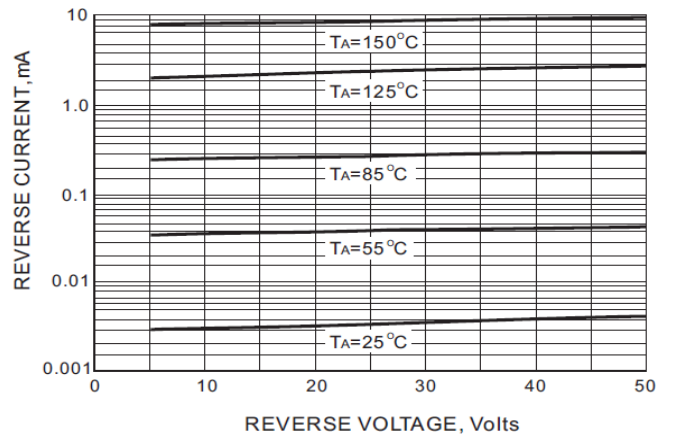
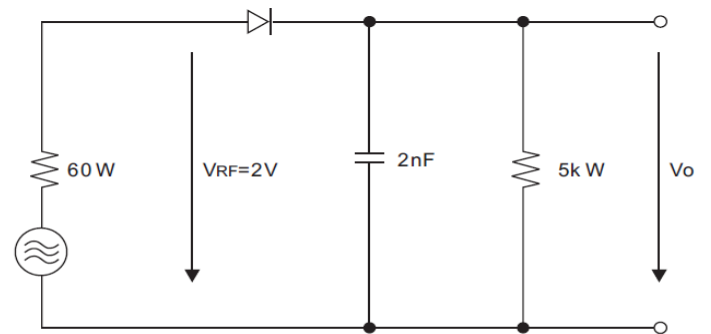
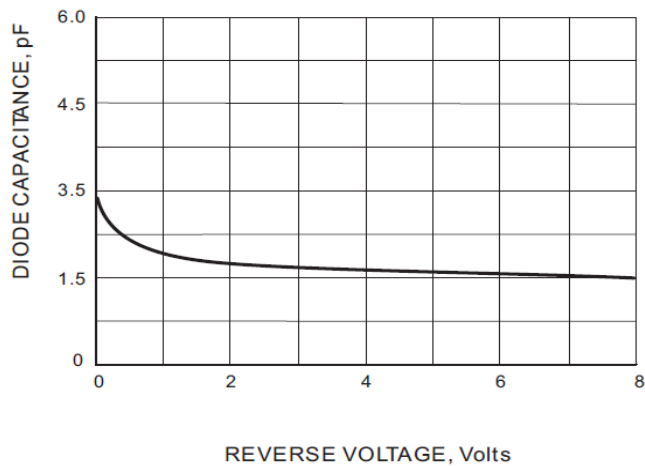


FIG. 3-TYPICAL CAPACITANCE CHARACTERISTICS



RECTIFICATION EFFICIENCY MEASUREMENT CIRCUIT

MOUNTING PAD LAYOUT

Unit: Inch(mm)

