

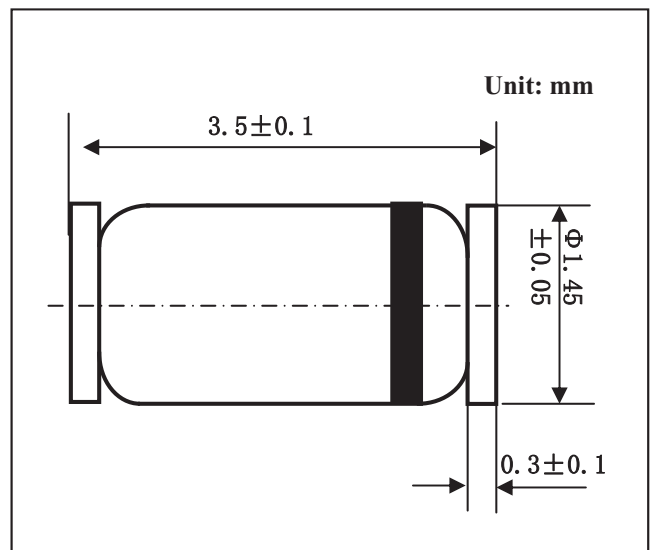
LL34 SILICON BIDIRECTIONAL DIODE

Features

- Hermetically Sealed Glass
- Low Reverse Leakage
- High Stability and High Reliability
- High Forward Surge Capability

Mechanical Data

- Case: LL-34 Glass Case
- Mounting Position: Any



MAXIMUM RATINGS AND CHARACTERISTICS

@ 25°C Ambient Temperature (unless otherwise noted)

Parameters	Symbol	Value	Unit
Power Dissipation	Pd	350	mW
Storage temperature	Ts	-40-+150	°C
Operating Junction Temperature	Tj	100	°C

Notes: The glass passivated, three-layer, two terminal, axial lead, hermetically sealed diacs are designed specifically for triggering thyristors. They demonstrate low breakover current at breakover voltage as they withstand peak pulse current. The breakover symmetry is within four bolts with a typical breakover voltage of 32 volts. These diacs are intended for use in thyristor phase control, circuits for lamp-dimming, universal-motor speed controls, and heat controls.

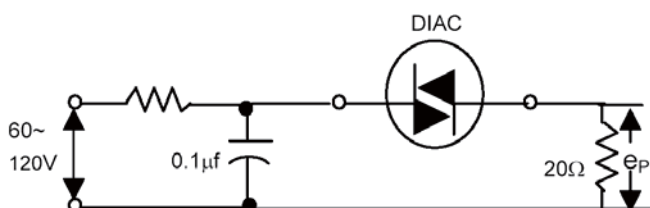
Electrical Specification (T_A=25°C unless otherwise specified)

Test	Symbol	Min	Typ.	Max.	Unit
Breakover Voltage	VBO1&VBO2	28	32.0	36	V
Breakover Currents	IBO1&IBO2	-	-	200	uA
Breakover Voltage Symmetry	VBO1 - VBO2	-	-	3.8	V
Dynamic Breakover Voltage Δ I=[IBO to IF = 10mA]	± Δ V	5	-	-	V
Thermal Impedance Junction To Ambient	R _{θJA}	-	-	60	°C/W

MAXIMUM RATINGS AT 50°C Ambient

- Peak Current(10u sec duration, 120 cycle repetition rate) I_p ±2Amperes Max.
- Peak output voltage e_p 3 ±volts Max*

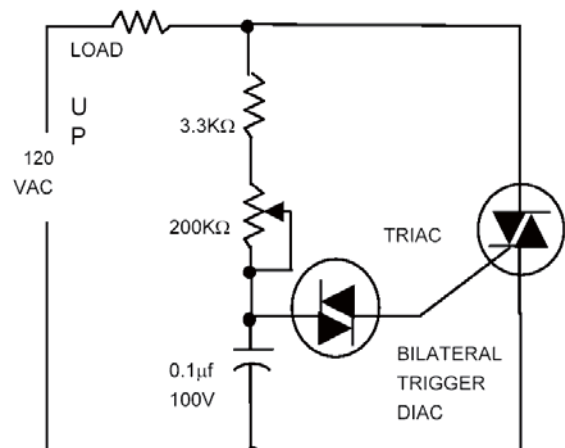
*CIRCUIT FOR PEAK OUTPUT VOLTAGE TEST



Characteristics at T_{amb} = 25°C

TYPICAL DIAC-TRIAC

FULL-WAVE PHASE CONTROL CIRCUIT



RATINGS AND CHARACTERISTIC CURVES

FIG.1-VOLTAGE-CURRENT CHARACTERISTIC CURVE

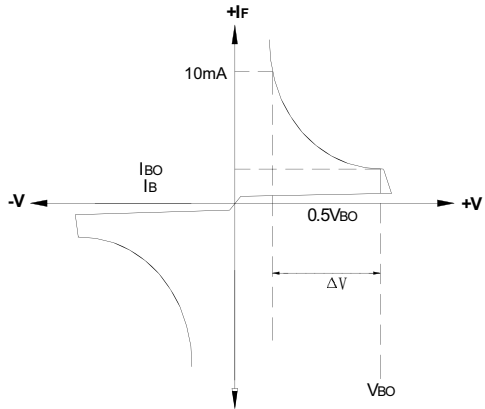


FIG.2-TEST CIRCUIT FOR OUTPUT VOLTAGE

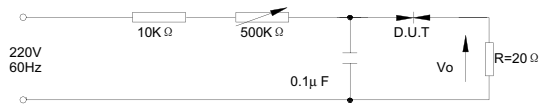


FIG.3- TEST CIRCUIT SEE FIG.2 ADJUST R FOR $I_p=0.5A$

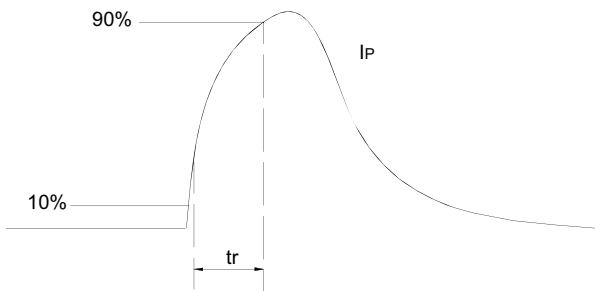


FIG.4-POWER DISSIPATION VERSUS AMBIENT TEMPERATURE (MAXIMUM VALUES)

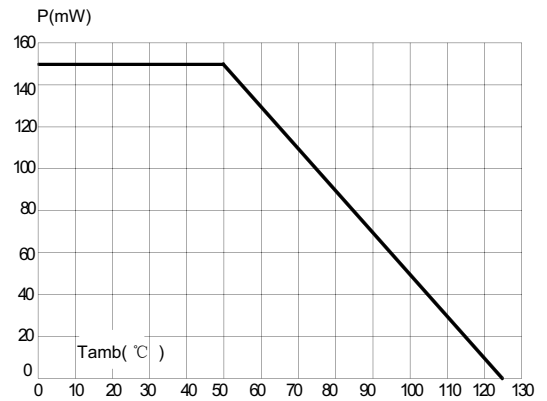


FIG.5-RELATIVE VARIATION OF V_{BO} VERSUS JUNCTION TEMPERATURE(TYPICAL VALUES)

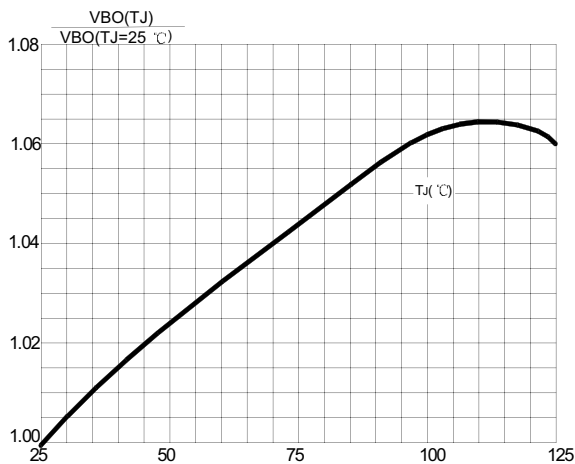


FIG.6-PEAK PULSEE CURRENT VERENT VERSUS PULSE DURATION(MAXIMUM VALUES)

