

LSDB3, LSDB4

SILICON BIDIRECTIONAL DIACS

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 volts with a typical breakover voltage of LSDB3 32 V, LSDB4 40 V. These diacs are intended for use in thyristor phase control, circuits for lamp-dimming, universal-motor speed controls, and heat controls.

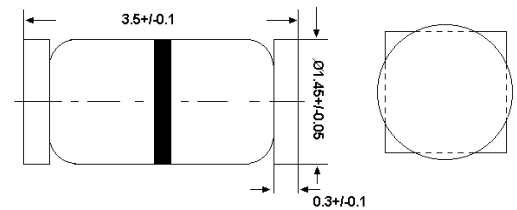
Storage Temperature Range T_S - 40 °C to +150 °C
Operating Temperature Range T_J - 40 °C to +100 °C

MAXIMUM RATINGS at 50 °C Ambient

Peak Current (10 μ s duration, 120 cycle repetition rate) $I_P \pm 2$ A Max.

Peak output voltage e_P 3 $\pm$ Volts Max.¹⁾

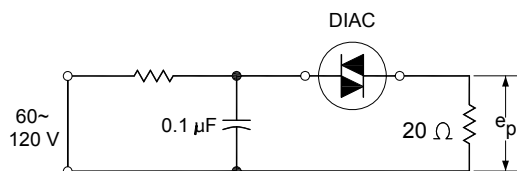
LS-34



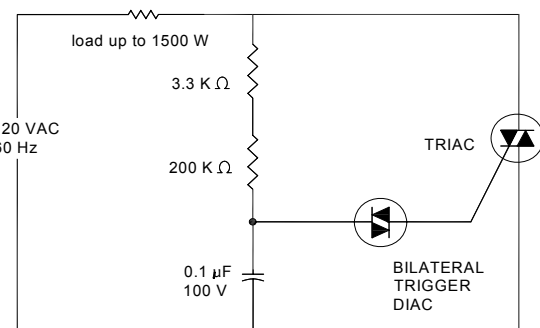
QuadromELF
Dimensions in mm

Characteristics at $T_a = 25$ °C

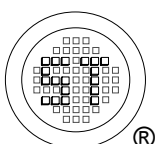
Parameter		Symbol	Min.	Max.	Unit
Breakover Voltage	LSDB3	$V_{(BR)1}$ and $V_{(BR)2}$	28	36	V
	LSDB4		35	45	
Breakover Currents		$I_{(BR)1}$ and $I_{(BR)2}$	-	200	μ A
Breakover Voltage Symmetry		$ V_{(BR)1} - V_{(BR)2} $	-	3.8	V
Dynamic Breakover Voltage $\Delta I = [I_{BR} \text{ to } I_F = 10 \text{ mA}]$		$ \Delta V \pm $	5	-	V
Thermal Impedance Junction to Ambient Air		$R_{\theta JA}$	-	60	°C/W



¹⁾ CIRCUIT FOR PEAK OUTPUT VOLTAGE TEST



TYPICAL DIAC-TRIAC FULL-WAVE PHASE
CONTROL CIRCUIT



SEMTECH ELECTRONICS LTD.

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ISO/TS 16949 : 2002
Certificate No. 05103



ISO 14001:2004
Certificate No. 7116



ISO 9001:2000
Certificate No. 0506088

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