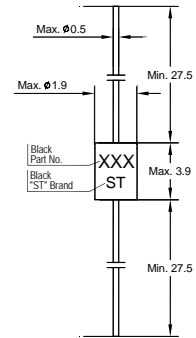


# DB3, DB4, DC34

## 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. These diacs are intended for use in thyristor phase control, circuits for lamp-dimming, universal-motor speed controls, and heat controls.



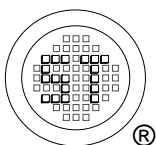
Glass Case DO-35  
Dimensions in mm

### Absolute Maximum Ratings ( $T_a = 25\text{ }^\circ\text{C}$ )

Parameter	Symbol	Value	Unit
Power Dissipation ( $T_a = 65\text{ }^\circ\text{C}$ )	$P_{\text{tot}}$	150	mW
Repetitive Peak On-state Current ( $t_p = 20\text{ }\mu\text{s}$ , $f = 100\text{ Hz}$ )	$I_{\text{TRM}}$	2	A
Operating Junction and Storage Temperature Range	$T_j, T_{\text{stg}}$	- 40 to + 125	$^\circ\text{C}$

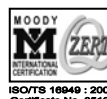
### Characteristics at $T_a = 25\text{ }^\circ\text{C}$

Parameter		Symbol	Min.	Max.	Unit
Breakover Voltage	DB3	$V_{(\text{BR})1}$ and $V_{(\text{BR})2}$	28	36	V
	DC34		30	38	
	DB4		35	45	
Breakover Currents		$I_{(\text{BR})1}$ and $I_{(\text{BR})2}$	-	200	$\mu\text{A}$
Breakover Voltage Symmetry		$ V_{(\text{BR})1}  -  V_{(\text{BR})2} $	-	3.8	V
Dynamic Breakover Voltage $\Delta I = [I_{\text{BR}} \text{ to } I_{\text{F}} = 10\text{ mA}]$		$ \Delta V \pm $	5	-	V



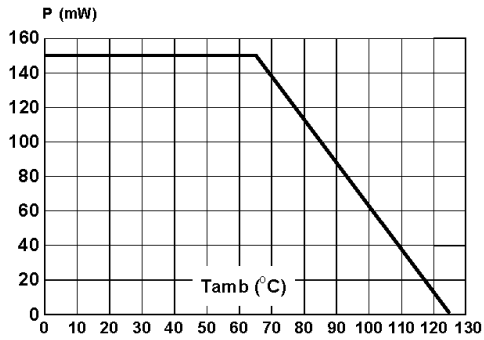
**SEMTECH ELECTRONICS LTD.**

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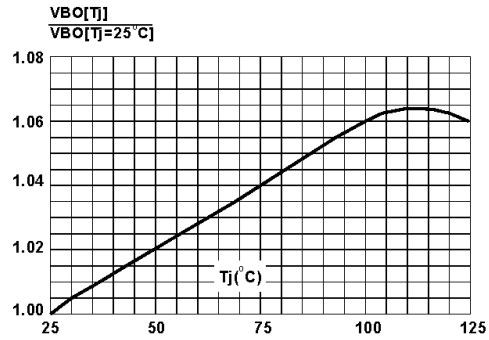


# DB3, DB4, DC34

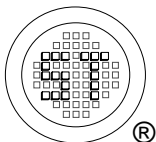
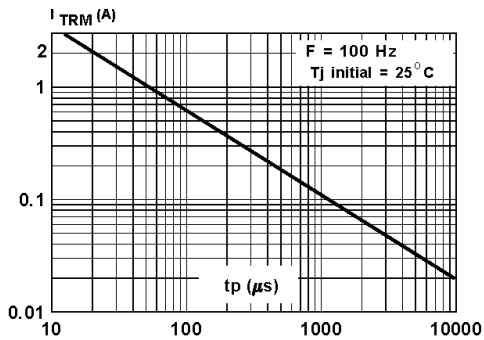
**Fig.1 :** Power dissipation versus ambient temperature (maximum values)



**Fig.2 :** Relative variation of V<sub>BO</sub> versus junction temperature (typical values)



**Fig.3 :** Peak pulse current versus pulse duration (maximum values)



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