

# DB3 /DB4 / DC34

# TRIGGER DIODES

### FEATURES

- VBO: 32V / 34V / 40V VERSIONS
- LOW BREAKOVER CURRENT



#### DESCRIPTION

High reliability glass passivation insuring parameter stability and protection against junction contamination.

#### ABSOLUTE RATINGS (limiting values)

Symbol	Parameter	Value	Unit	
Р	Power dissipation on printed circuit (L = 10 mm)	Ta = 65 °C	150	mW
I <sub>TRM</sub>	Repetitive peak on-state current	tp = 20 μs F= 100 Hz	2	A
Tstg Tj	Storage and operating junction temperat	- 40 to + 125 - 40 to + 125	°C ℃	

#### THERMAL RESISTANCES

Symbol	Parameter	Value	Unit
R <sub>th (j-a)</sub>	Junction to ambient	400	°C/W
Rth (j-I)	Junction-leads	150	°C/W

## DB3 / DB4 / DC34

Symbol	Parameter	Test Conditions		Value			Unit
				DB3	DC34	DB4	
V <sub>BO</sub>	Breakover voltage * C = 22nF **		MIN	28	30	35	V
	Se	see diagram 1	TYP	32	34	40	
			MAX	36	38	45	
[I+V <sub>BO</sub> I-I-V <sub>BO</sub> I]	Breakover voltage symmetry	C = 22nF ** see diagram 1	MAX	± 3			V
ΙΔV± Ι	Dynamic breakover voltage *	$\Delta I = [I_{BO} \text{ to } I_F=10\text{mA}]$ see diagram 1	MIN	5			V
Vo	Output voltage *	see diagram 2	MIN	5			V
I <sub>BO</sub>	Breakover current *	C = 22nF **	MAX	100	50	100	μA
tr	Rise time *	see diagram 3	TYP	1.5			μs
Ι <sub>Β</sub>	Leakage current *	V <sub>B</sub> = 0.5 V <sub>BO</sub> max see diagram 1	MAX	10			μA

# **ELECTRICAL CHARACTERISTICS** (Tj = $25^{\circ}$ C)

\* Electrical characteristic applicable in both forward and reverse directions.

\*\* Connected in parallel with the devices.

#### DIAGRAM 1 : Current-voltage characteristics



## DIAGRAM 2 : Test circuit for output voltage











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

Fig.2 : Relative variation of  $V_{BO}$  versus junction temperature (typical values)



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



### DB3 / DB4 / DC34

#### PACKAGE MECHANICAL DATA (in millimeters) DO 35 Glass

B $A$ $B$ $B$ $C$							
REF.	DIMENSIONS			NOTES			
	Millimeters Inches		hes				
	Min.	Max.	Min.	Max.			
А	3.050	4.500	0.120	0.117	1 - The lead diameter $\varnothing$ D is not controlled over zone E		
В	12.7		0.500		2 - The minimum axial lengh within which the device may be placed with its leads bent at right angles is 0.59"(15 mm)		
ØC	1.530	2.000	0.060	0.079			
ØD	0.458	0.558	0.018	0.022			
E		1.27		0.050			

Cooling method by convection and conduction Marking : type number Weight : 0.15 g Polarity : N A Stud torque : N A

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