

DB3/DC34/DB4/DB6

BIDIRECTIONAL DIODE THYRISTOR

FEATURES

- Low breakover current.
- Trigger diode with a fixed voltage reference.
- In compliance with EU RoHS 2002/95/EC directives

MECHANICAL DATA

- Case: Molded Glass DO-35
- Terminals: Solderable per MIL-STD-750, Method 2026
- Mounting Position: Any
- Packing information

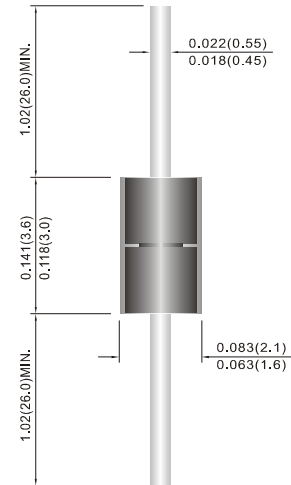
B/P - 2K per Bulk box

T/R - 10K per 13" Reel

T/B - 5K per horiz. tape & Ammo box

DO-35

Unit: inch (mm)



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS (T_J = 25°C unless otherwise noted)

Symbol	PARAMETER		DB3	DC34	DB4	DB6	Units
P _C	Power Dissipation on Printed Circuit (L=10mm)	TA=50°C	150				mW
I _{TRM}	Repetitive Peak in-state Current	tp=10us F=100Hz	2.0	2.0	2.0	1.6	A
T _{STG} /T _J	Storage and Operating Junction Temperature		-40 to 125/-40 to 110				°C

Symbol	PARAMETER	Test Conditions		DB3	DC34	DB4	DB6	Units
V _(BO)	Breakdown Voltage (Note 2)	c=22nF (Note 2) See diagram 1	Min	28	30	35	56	V
			Typ	32	34	40	60	
			Max	36	38	45	70	
+V _{BO} - V _{BO}	Breakover voltage symmetry	c=22nF (Note 2) See diagram 1	Max	±3			±4	V
±i _μ V	Dynamic breakover voltage	i _μ = I _{BO} to I _L =10mA See diagram 1	Min	5			10	V
V _O	Output Voltage (Note 1)	See diagram 2	Min	5				V
I _{BO}	Breakover current (Note 1)	c=22nF (Note 2)	Max	100				μA
t _r	Rise Time (Note 1)	See diagram 2	typ	1.5				μS
I _B	Leakage current (Note 1)	V _B =0.5V _{BO} max see diagram 3	Max	10				μA

NOTE1. ELECTRICAL CHARACTERISTIC APPLICABLE IN BOTH FORWARD AND REVERSE DIRECTIONS

NOTE2. G CONNECTED IN PARALLEL WITH DEVICE SC

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RATINGS AND CHARACTERISTIC CURVES DB3/DC34/DB4/DB6

DIAGRAM 1: Current-voltage characteristics

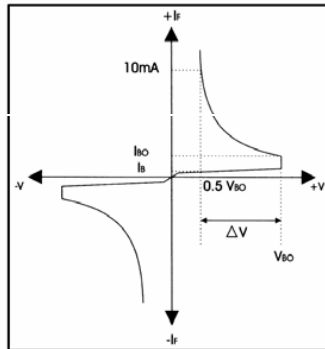


FIG.1-Power dissipation versus ambient temperature(maximum values)

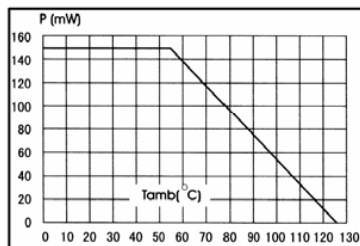


FIG.3-Peak pulse current versus pulse duration (maximum values)

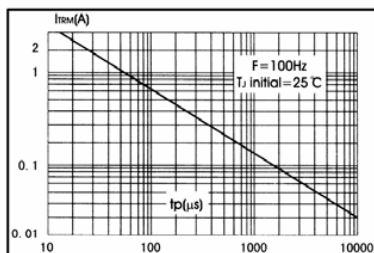


DIAGRAM 2: Test circuit for output voltage

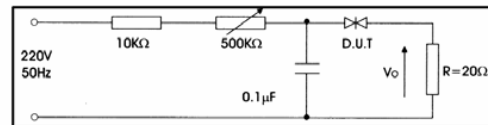


DIAGRAM 3: Test circuit see diagram2 adjust R for $I_p=0.5A$

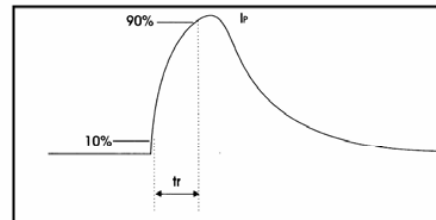
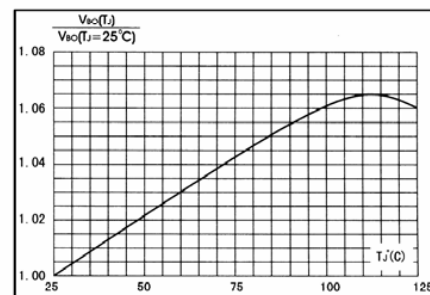


FIG.2-Relative variation of VBO versus junction temperature(typical values)



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Part No_packing code_Version

DB3_AX_10001

DB3_AY_10001

DB3_R2_10001

DB3_B0_10001

For example :

RB500V-40_R2_00001

Part No.

Serial number

Version code means HF

Packing size code means 13"

Packing type means T/R

Packing Code XX				Version Code XXXXX		
Packing type	1 st Code	Packing size code	2 nd Code	HF or RoHS	1 st Code	2 nd ~5 th Code
Tape and Ammunition Box (T/B)	A	N/A	0	HF	0	serial number
Tape and Reel (T/R)	R	7"	1	RoHS	1	serial number
Bulk Packing (B/P)	B	13"	2			
Tube Packing (T/P)	T	26mm	X			
Tape and Reel (Right Oriented) (TRR)	S	52mm	Y			
Tape and Reel (Left Oriented) (TRL)	L	PANASERT T/B CATHODE UP (PBCU)	U			
FORMING	F	PANASERT T/B CATHODE DOWN (PBCD)	D			

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