

Silicon Bidirectional

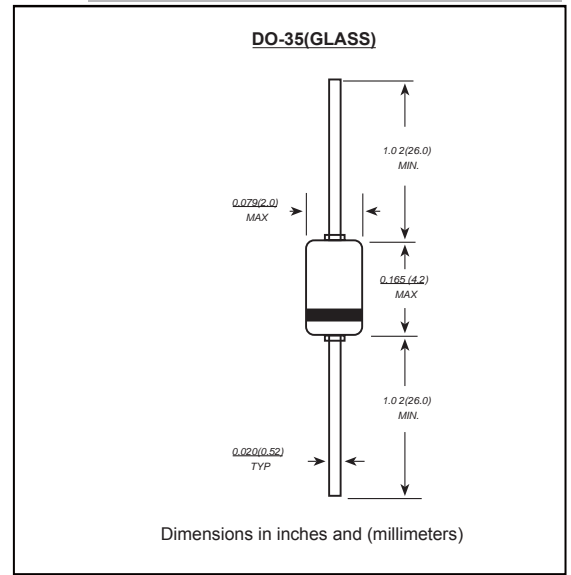
VOLTAGE RANGE: 30-60V
PEAK PULSE POWER: 150mW

Features

- They demonstrate low breakover current at breakover voltage as they withstand peak pulse current.
- The breakover symmetry is within three volts (DB3, DC34, DB4) or four volts (DB6).
- JF's DB3/DC34/DB4/DB6 are bi-directional triggered diode designed to operate in conjunction with Triacs and SCR's
- Component in accordance to RoHS 2002/95/EC and WEEE 2002/96/EC
- High temperature soldering guaranteed: 260/10 seconds at terminals

MECHANICAL DATA

- Case: DO-35
- Polarity: Color band denotes cathode end
- Mounting Position: Any



MAXIMUM RATINGS AND CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified

Symbols	Parameters	Value	Value				Units
			DB3	DC34	DB4	DB6	
PC	Power Dissipation on Printed Circuit(L=10mm)	$T_A=50^\circ\text{C}$	150				mW
I _{TRM}	Repetitive Peak on-state Current	$t_p=10\mu\text{s}$ $f=100\text{Hz}$	2.0	2.0	-40 to +125/-40	1.6	A
T _{STG/TJ}	Storage and Operating Junction Temperature		to +110				°C

Electrical Specification ($T_A=25^\circ\text{C}$ unless otherwise specified)

Symbols	Parameters	Test Condition	Value				Units	
			DB3	DC34	DB4	DB6		
V _{BO}	Breakover 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	
$\frac{ +V_{BO} }{ -V_{BO} }$	Breakover Voltage Symmetry	C=22nF(Note 2) See diagram 1	Max	±3			±4	V
ΔV	Dynamic Breakover Voltage (Note1)	ΔI=(I _{BO} to I _F =10mA) See Diagram 1	Min	5			1	V
V _O	Output Voltage (Note 1)	See Diagram 2	Min	5			V	
I _{BO}	Breakover Current (Note1)	C=22nF(Note 2)	Max	100			μA	
t _r	Rise Time (Note1)	See Diagram 3	Typ	1.5			μs	
I _B	Leakage Current (Note1)	V _B =0.5 V _{BO} max see diagram 1	Max	10			μA	

RATINGS AND CHARACTERISTIC CURVES

DIAGRAM 1: Current-voltage characteristics

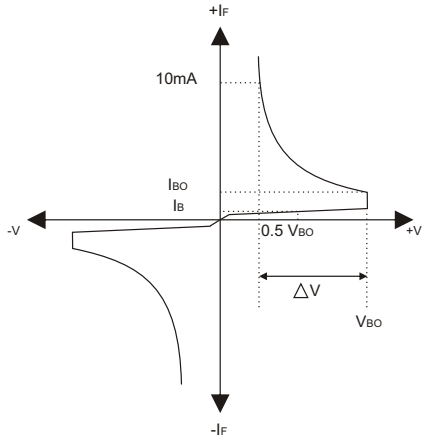


FIG.1-Power dissipation versus ambient temperature (maximum values)

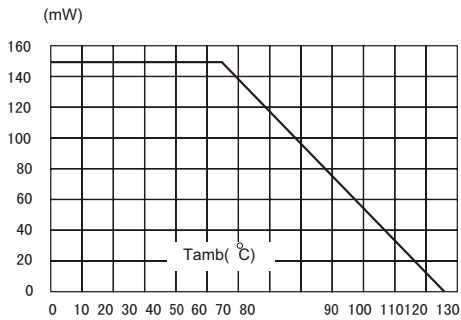


FIG.3-Peak pulse current versus pulse duration (maximum values)

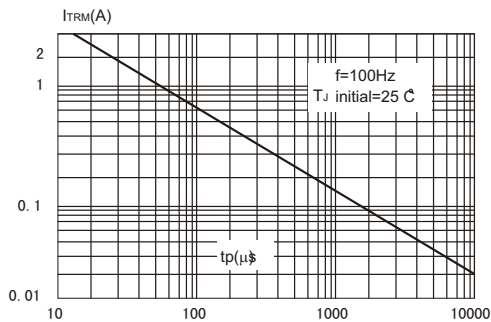


DIAGRAM 2: Test circuit for output voltage

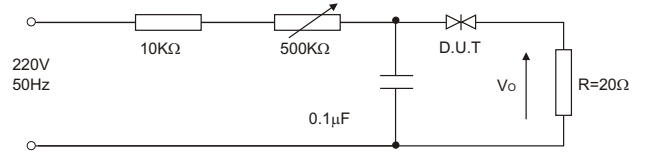


DIAGRAM 3: Test circuit see diagram2 adjust R for P = 0.5 A

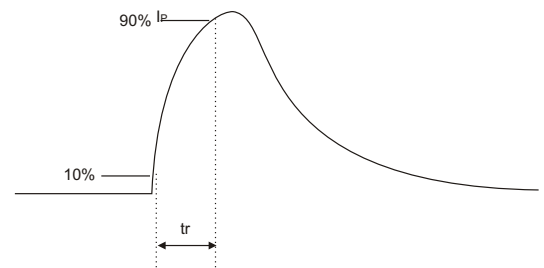


FIG.2-Relative variation of VBO versus junction temperature (typical values)

