

# **DO-35 SILICON BIDIRECTIONAL DIODE**

### **Features**

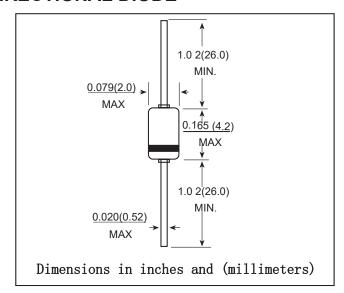
- •They demonstrate low breakovercurrent at breakover voltage as they withstand peak pulse current.
- •The breakoversymmetry is within three volts(DB3,DC34,DB4) or four volts(DB6).
- •JF's DB3/DC34/DB4/DB6 are bi-directional triggered diode designed to operate in conjunction with Triacs and SCR's
- •Component in accordance to RoHS 2015/863 and WEEE 2012/19/EU High temperature solsering gearanteed:260/10 seconds at terminals

### **MECHANICAL DATA**

•Case: DO-35

•Polarity: Color band denotes cathode end

Mounting Position: Any



### MAXIMUM RATINGS AND CHARACTERISTICS

## @ 25°C Ambient Temperature (unless otherwise noted)

Symbols	Parameters		Value				Units
Gymbols			DB3	DC34	DB4	DB6	Office
Pc	Power Dissipation on Printed Circuit(L=10mm)	TA=50 Ĉ	150				mW
ITRM	Repetitive Peak on-state Current	tp=10μs f=100Hz	2.0 2.0 to=+11	2.0 -40 to- 0	+125/-40	1.6	А
Tstg/TJ	Storage and Operating Junction Temperature						°C

# Electrical Specification (TA=25°C unless otherwise specified)

	Parameters	Test Condition		Value				I I a te
Symbols				DB3	DC34	DB4	DB6	Units
		C=22nF(Note 2)	Min	28	30	35	56	
Vво	Breakover Voltage (Note 2 )	See diagram 1	Тур	32	34	40	60	V
			Max	36	38	45	70	
++VBO  -  -VBO	Breakover Voltage Symmetry	C=22nF(Note 2) See diagram 1	Max	<u>+</u> 3			<u>+</u> 4	٧
<b>\(\nabla V\)</b>	Dynamic Breakover Voltage (Note1)	∆I=(Iво to IF=10mA) See Diagram 1	Min	5			10	V
Vo	Output Voltage (Note 1 )	See Diagram 2	Min	5				V
Іво	Breakover Current (Note1)	C=22nF(Note 2)	Max	100				μА
tr	Rise Time (Note1)	See Diagram 3	Тур	1.5				μs
Ів	Leakage Current (Note1)	V <sub>B</sub> =0.5 V <sub>BO</sub> max see diagram 1	Max	10				μΑ



# **RATINGS AND CHARACTERISTIC CURVES**

#### DDIAGRAM 1: Current-voltage characteristics

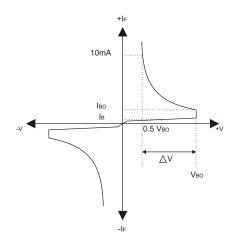


FIG.1-Power dissipation versus ambie nt temperature (maximum values) P

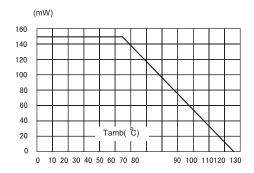
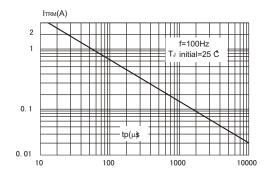


FIG.3-Peak pulse current versus pulse durati on (maximum values)



#### DIAGRAM 2: Test circuit for output voltage

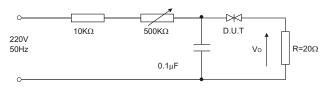


DIAGRAM 3: Test circuit see diagram2 adjust R for  $\,{\mbox{\scriptsize P}}=0$  .5 A  $\,{\mbox{\scriptsize I}}$ 

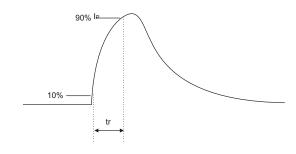


FIG.2-Relative variation of VBO versus junction temperature (typical values)

