















**ESD** 

TVS

MOS

LDO

Diode

Sensor

DC-DC

# **Product Specification**

Domestic Part Number	DB3/DC34/DB4/DB6
<ul><li>Overseas Part Number</li></ul>	DB3/DC34/DB4/DB6
▶ Equivalent Part Number	DB3/DC34/DB4/DB6

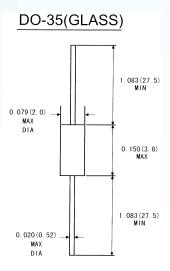




#### **FEATURES**

The 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, The breakover symmetry is within three volts (DB3, DC34, DB4) or four volts (DB6). These diacs are intended for use in thyrisitors phase control, circuits for lamp dimming, universal motor speed control, and heat control.

JF's DB3/DC34/DB4/DB6 are bi-directional trigged diode designed to operate in conjunction with Triacs and SCR's



Dimensions in inches and (millimeters)

# **ABSOLUTE RATINGS(LIMITING VALUES)**

Symbols	Value		Value				Units
Symbols			DB6				
Pc	Power Dissipation on Printed Circuit(L=10mm)	TA=50 <b>°</b> €	150				mW
$I_{TRM}$	Repetitive Peak in-state Current	tp=10u s F=100Hz	2.0	2.0	2.0	1.6	А
Tstg/TJ	Storage and Operating Junction Temperature		-40 to +125/-40 to 110				°C

## **ELECTRCAL CHARACTERISTICS**

Symbols	Parameters	Test Conditions		Value				Units
Symbols Farameters		rest Conditions		DB3	DC34	DB4	DB6	Offics
		c=22nF(Note 2)	Min	28	30	35	56	
VBO	Breakover Voltage(Note 2)	See diagram1	Тур	32	34	40	60	V
			Max	36	38	45	70	
+VBO -	Breakover Voltage Symmetry	c=22nF(Note 2)	Max	± 3			<u>±</u> 4	V
-VBO	<b>0</b> ,	See diagram1	IVIAA		1 3			V
±∆ ∨  Dynamic Breakover Voltage(Note 1)	$\Delta$ I=(IBO to IF=10mA)	Min	5			10	V	
	See diagram1	IVIIII		<u> </u>		10	V	
Vo	Output Voltage(Note 1)	See diagram2	Min	5				V
IBO	Breakover Current(Note 1)	c=22nF(Note 2)	Max	100			μд	
tr	Rise Time(Note 1)	See Diagram 3	Тур	1.5			μs	
IB Leakage Current(Note 1)	V <sub>B</sub> =0.5 V <sub>B</sub> O max	Max	x 10			ПΑ		
	see diagram 1	iviax	viax I				μА	

Notes: 1. Electrical characteristics applicable in both forward and reverse directions.

<sup>2.</sup> Connected in parallel with the devices.



#### RATINGS AND CHARACTERISTIC CURVES DB3/DC34/DB4/DB6

### **DIAGRAM 1: Current-voltage charateristics**

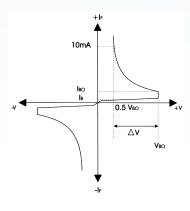


FIG.1-Power disspation versus ambient temperature(maximum values)

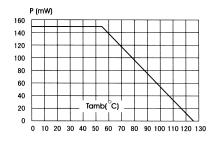
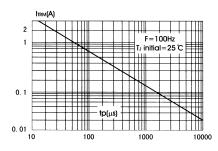


FIG.3-Peak pulse current versus pulse duration (maximum values)



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

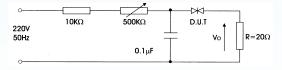


DIAGRAM 3: Test circuit see diagram2 adjust R for Ip=0.5A

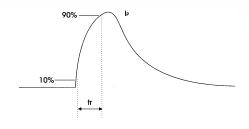
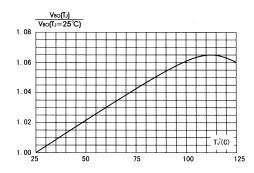


FIG.2-Relative variation of VBO versus juntion temperature(typical values)





# Disclaimer

EVVOSEMI ("EVVO") reserves the right to make corrections, enhancements, improvements, and other changes to its products and services at any time, and to discontinue any product or service without notice.

EVVO warrants the performance of its hardware products to the specifications applicable at the time of sale in accordance with its standard warranty. Testing and other quality control techniques are used as deemed necessary by EVVO to support this warranty. Except where mandated by government requirements, testing of all parameters of each product is not necessarily performed.

Customers should obtain and confirm the latest product information and specifications before final design, purchase, or use. EVVO makes no warranty, representation, or guarantee regarding the suitability of its products for any particular purpose, nor does EVVO assume any liability for application assistance or customer product design. EVVO does not warrant or accept any liability for products that are purchased or used for any unintended or unauthorized application.

EVVO products are not authorized for use as critical components in life support devices or systems without the express written approval of EVVOSEMI.

The EVVO logo and EVVOSEMI are trademarks of EVVOSEMI or its subsidiaries in relevant jurisdictions. EVVO reserves the right to make changes without further notice to any products herein.