RECTRON SEMICONDUCTOR
TECHNICAL SPECIFICATION

DB3S

TRIGGER DIODES

FEATURES
* V_{BO}: 32V/34V/40V VERSIONS
* Low Breakover Current

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

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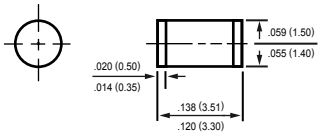

Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS
Ratings at 25 °C ambient temperature unless otherwise specified.
Single phase, half wave, 60 Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

MAXIMUM RATINGS (At T_A = 25°C unless otherwise noted)

RATING	SYMBOL	VALUE	UNITS
Repetitive Peak On-State Current tp=20uA,F=100Hz	I_{TRM}	2	A
Power Dissipation (@ T_A=50°C)	P	150	mW
Derate Above +50°C		4.0	mW/°C
Storage Temperature Range	T_{STG}	-40 to + 125	°C
Junction Temperature	T_J	125	°C

ELECTRICAL CHARACTERISTICS (At T_A = 25°C unless otherwise noted)

RATING	SYMBOL	VALUE				UNITS
		DB3S-1		DB3S-2		
Breakover Voltage(Forward and Reverse) at I_{BO},C=22nF**	V_{BO}	Min	Max	Min	Max	Volts
		30	34	28	36	
Maximum Breakover Voltage Symmetry delta V_{BO}=|+VBO|-|-VBO| C=22nF	delta V_{BO}	+/-2				Volts
Minimum Dynamic Breakover Voltage delta I=I_{BO} to I_F=10mA (see Fig3)	|delta V+/-|	5				Volts
Minimum Output Voltage* (see Fig 2)	V_O	5				Volts
Peak Breakover Current at Breakorver Voltage* C=22nF**	I_{BO}	25		100		uA
Rise Time* (see Fig3)	t_r	1.5				uS
Leakage Current* V_B=0.5V_{BO} max (see Fig1)	I_B	10				uA

NOTES: 1. *Electrical characteristic applicable in both forward and reverse derections.
2.**Connected in parallel with the devices.
3. "Fully ROHS compliant", "100% Sn plating (Pb-free)".

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RATING AND CHARACTERISTICS CURVES (DB3S)

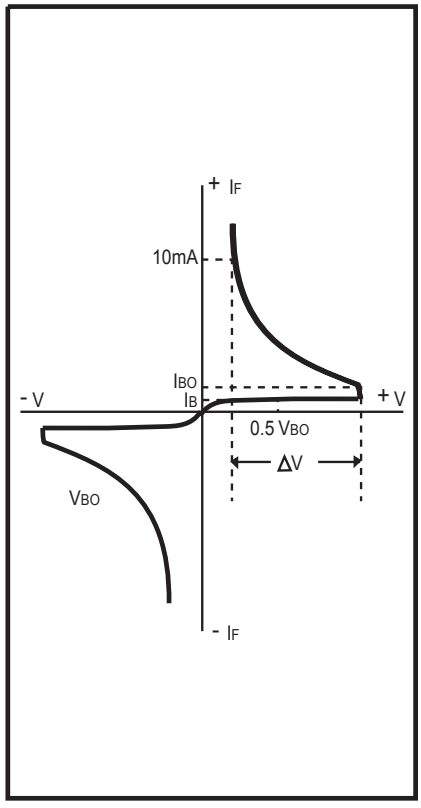

FIG.1 Current-voltage characteristics

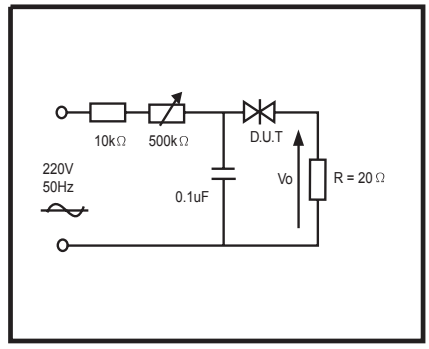

FIG.2 Test circuit for output voltage

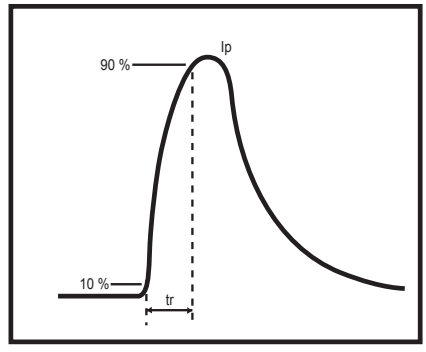

FIG.3 Test circuit see Fig.2
Adjust R for Ip=0.5A

RATING AND CHARACTERISTICS CURVES (DB3S)

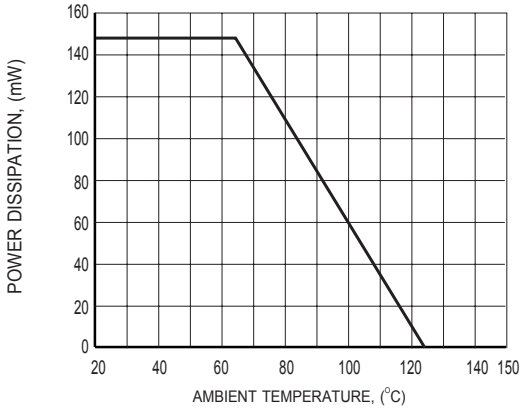

FIG.4 POWER DISSPATION VERSUS AMBIENT TEMPERATURE (MAXIMUM VALUES)

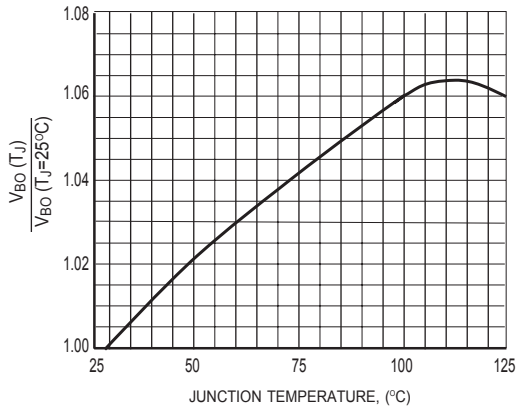

FIG.5 RELATIVE VARIATION OF V_{BO} VERSUS JUNCTION TEMPERATURE (TYPICAL VALUES)

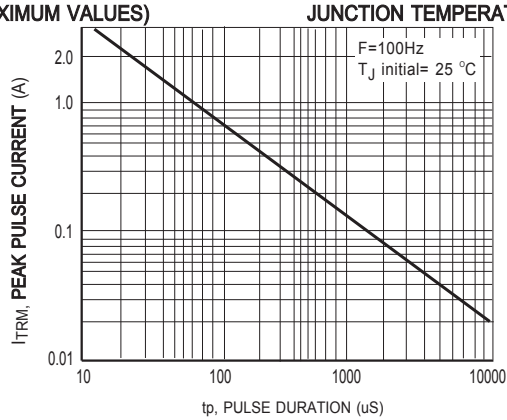

FIG.6 PEAK PULSE CURRENT VERSUS PULSE DURATION (MAXIMUM VALUES)

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