

# DB3

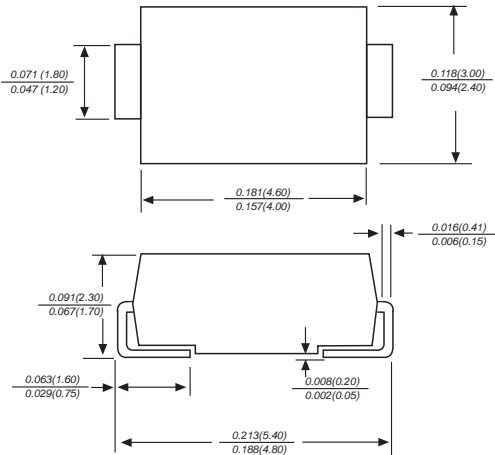
## BIDIRECTIONAL TRIGGER DIODE

Reverse Voltage - 32 Volts Power: 150mW

### FEATURES

- ◆ The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- ◆ For surface mounted applications
- ◆ Low reverse leakage
- ◆ Built-in strain relief, ideal for automated placement
- ◆ High forward surge current capability
- ◆ High temperature soldering guaranteed: 250°C/10 seconds at terminals

### DO-214AC



Dimensions in inches and (millimeters)

### MECHANICAL DATA

**Case:** JEDEC DO-214AC molded plastic body

**Terminals:** Solder plated, solderable per MIL-STD-750, Method 2026

**Polarity:** Color band denotes cathode end

**Mounting Position:** Any

**Weight:** 0.003 ounce, 0.093 grams

### MAXIMUM RATINGS AND CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

	TEST CONDITION	SYMBOLS	VALUE			UNITS
			Min.	Typ.	Max.	
Breakover voltage *	C=22nF **	$V_{BO}$	28	32	36	VOLTS
Breakover voltage symmetry	C=22nF **	$ +V_{BO1}-I-V_{BO} $	-3		3	VOLTS
Dynamic breakover voltage *	(NOTE 1)	$I_D V_{+I}$	5			VOLTS
Output voltage *	DIAGRAM2	$V_o$	5			VOLTS
Breakover current *	C=22nF **	$I_{BO}$			100	$\mu A$
Rise time *	DIAGRAM3	tr		1.5		mS
Leakage current *	$V_R=0.5V_{BO}$	$I_B$			10	$\mu A$
Power dissipation on printed circuit	$T_A=65^\circ C$	Pd			150	mW
Repetitive peak on-state current	tp=20ms f=100Hz	$I_{TRM}$			2	A
Thermal Resistances from Junction to ambient		$R_{\theta JA}$			400	$^\circ C/W$
Thermal Resistances from Junction to lead		$R_{\theta JL}$			150	
Operating junction and storage temperature range		$T_J, T_{STG}$	-40		125	$^\circ C$

\* :Electrical characteristic appoicaboe in forward and reverse directions.

\*\* :Connected in parallel with the devices. Note 1:If from to 10mA

# RATINGS AND CHARACTERISTIC CURVES DB3

DIAGRAM 1: CURRENT-VOLTAGE CHARACTERISTICS

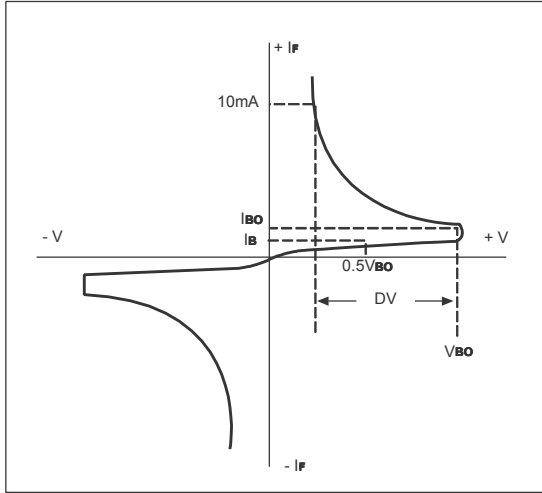


FIG. 1-POWER DISSIPATION VERSUS AMBIENT TEMPERATURE(MAXIMUM VALUES)

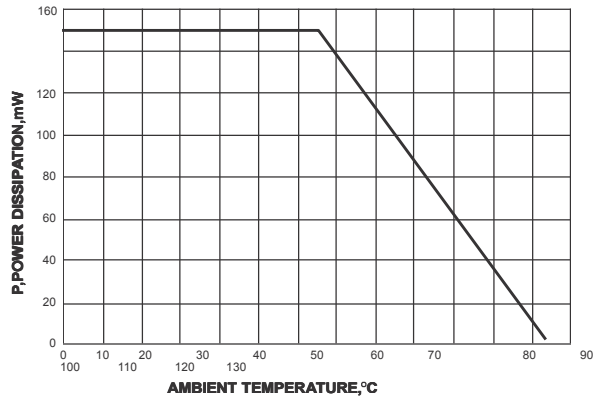


FIG. 2-PEAK PULSE CURRENT VERSUS PULSE DURATION (MAXIMUM VALUES)

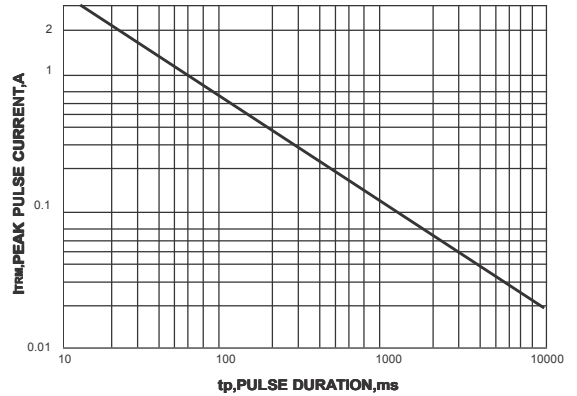


DIAGRAM 2:TEST CIRCUIT OUTPUT VOLTAGE

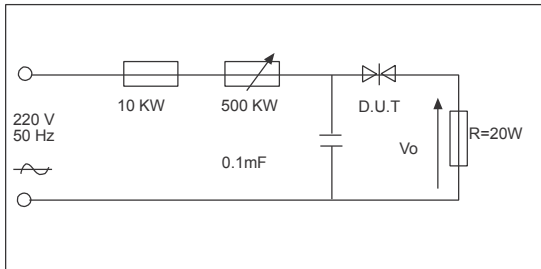


FIG. 3-RELATIVE VARIATION OF VBo VERSUS JUNCTION TEMPERATURE(TYPICAL VALUES)

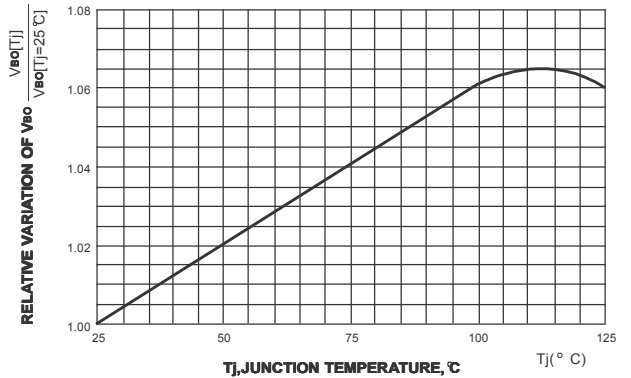


DIAGRAM 3:TEST CIRCUIT SEE DIAGRAM 2.ADJUST R FOR Ip=0.5A

