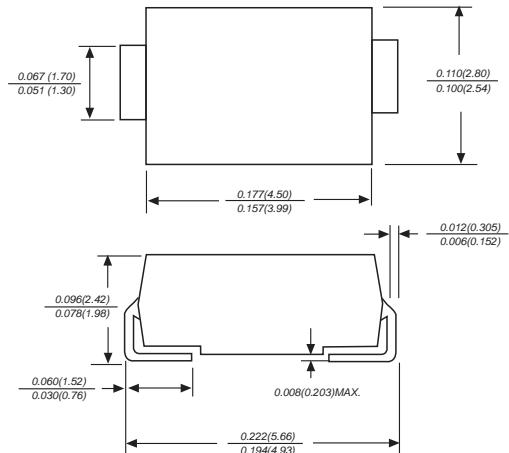


DB3

BIDIRECTIONAL TRIGGER DIODE

Reverse Voltage - 32 Volts Power: 150mW

DO-214AC



Dimensions in inches and (millimeters)

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

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 **	I+V _{BOL} -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	µ A
Rise time *	DIAGRAM3	tr		1.5		mS
Leakage current *	V _R =0.5V _{BO}	I _B			10	µ A
Power dissipation on printed circuit	T _A =65 °C	P _d			150	mW
Repetitive peak on-state current	t _p =20ms f=100Hz	I _{TRM}			2	A
Thermal Resistances from Junction to ambient		R _{QA}			400	°C/W
Thermal Resistances from Junction to lead		R _{QL}			150	
Operating junction and storage temperature range		T _J , T _{STG}	-40		125	°C

* :Electrical characteristic approachable in forward and reverse directions.

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

RATINGS AND CHARACTERISTIC CURVES DB3

DIAGRAM 1: CURRENT-VOLTAGE CHARACTERISTICS

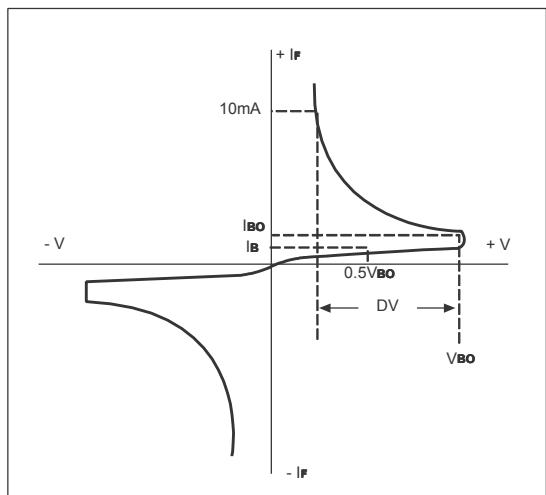


DIAGRAM 2: TEST CIRCUIT OUTPUT VOLTAGE

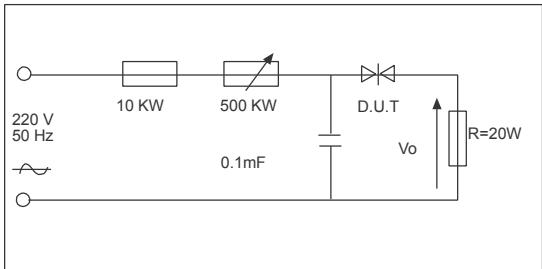


DIAGRAM 3: TEST CIRCUIT SEE DIAGRAM 2. ADJUST R FOR $I_p=0.5\text{A}$

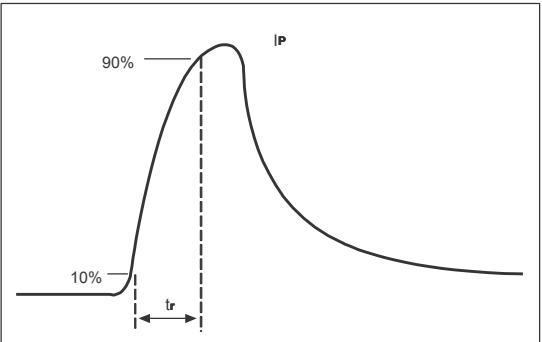


FIG. 1-POWER DISSIPATION VERSUS AMBIENT TEMPERATURE(MAXIMUM VALUES)

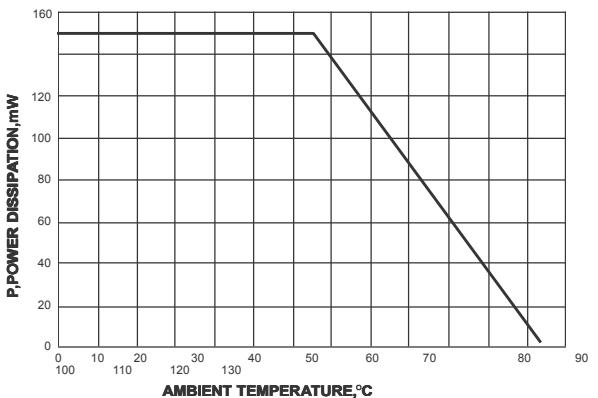


FIG. 2-PEAK PULSE CURRENT VERSUS PULSE DURATION (MAXIMUM VALUES)

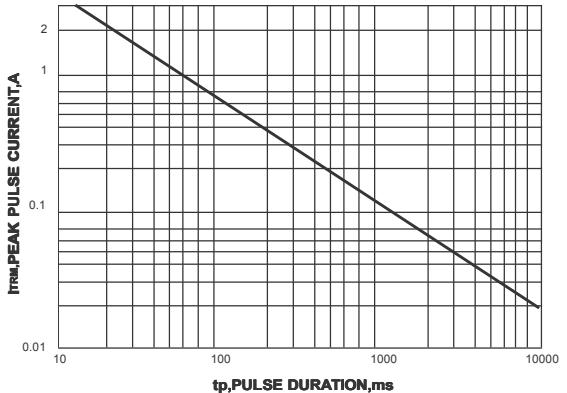


FIG. 3-RELATIVE VARIATION OF V_{o0} VERSUS JUNCTION TEMPERATURE(TYPICAL VALUES)

