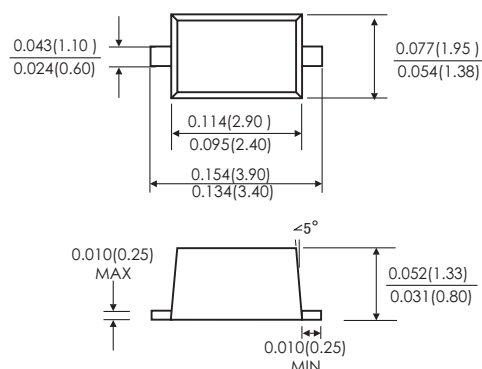


FEATURES

- These diacs are intended for use in thyristor phase control.
Circuits for lamp-dimming, universal-motor speed controls.
And heat controls.
- High temperature soldering guaranteed: 260°C/10 seconds at terminals



SOD-123FL



MECHANICAL DATA

- Case: SOD-123FL molded plastic body

Dimensions in inches and (millimeters)

ABSOLUTE RATINGS (LIMITING VALUES)

Symbols	Parameters	Value	Units
P _C	Power Dissipation T _A =65°C	150	mW
I _{TRM}	Repetitive Peak on-state Current t _p =10μs F=100Hz	2.0	A
T _{STG} /T _J	Storage and Operating Junction Temperature	-40 to +125	°C

ELECTRICAL CHARACTERISTICS

Symbols	Parameters	Test Condition	Value	Units
V _{BO}	Breakover Voltage (Note 2)	C=22nF (Note 2) See diagram 1	Min: 28 Typ: 32 Max: 36	V
+V _{BO} -V _{BO}	Breakover Voltage Symmetry	C=22nF (Note 2) See diagram 1	Max: ±3	V
±ΔV	Dynamic Breakover Voltage (Note 1)	ΔI=(I _{BO} to I _F =10mA) See Diagram 1	Min: 5	V
V _O	Output Voltage (Note 1)	See Diagram 2	Min: 5	V
I _{BO}	Breakover Current (Note 1)	C=22nF (Note 2)	Max: 50	μA
t _r	Rise Time (Note 1)	See Diagram 3	Typ: 2	μs
I _B	Leakage Current (Note 1)	V _B =0.5 V _{BO} max see diagram 1	Max: 10	μA

Notes: 1. Electrical characteristics applicable in both forward and reverse directions.
2. Connected in parallel with the devices.

RATINGS AND CHARACTERISTIC CURVES DB3W

DIAGRAM 1: Current-voltage characteristics

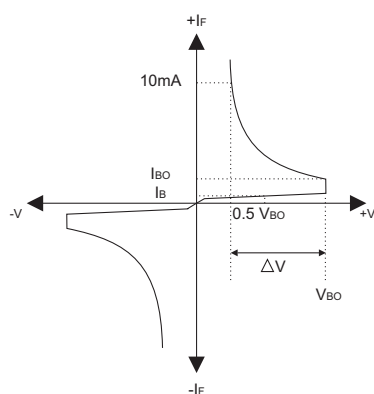


FIG.1-Power dissipation versus ambient temperature (maximum values)

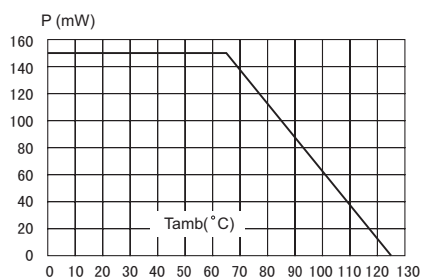


FIG.3-Peak pulse current versus pulse duration (maximum values)

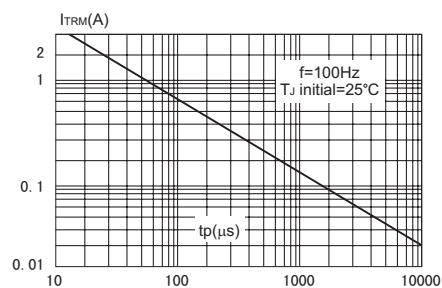


DIAGRAM 2: Test circuit for output voltage

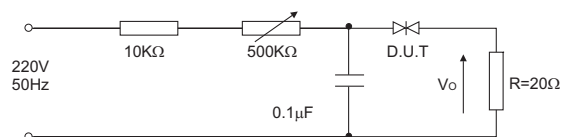


DIAGRAM 3: Test circuit see diagram2 adjust R for $I_P=0.5\text{A}$

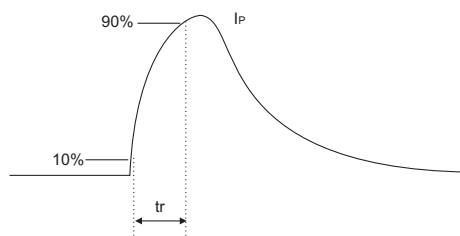


FIG.2-Relative variation of V_{BO} versus junction temperature (typical values)

