

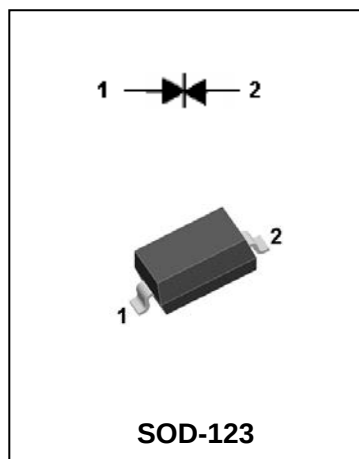
SURFACE MOUNT RECTIFIER

SODDB3 / SODDB3T

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.These diacs are intended for use in thyristors phase control,circuits for lamp dimming,universal motor speed control,and heat control.

HF



APPLICATION

- Only suitable for discontinuous triggering applications.

ORDERING INFORMATION

Type No.	Marking	Package Code
SODDB3	DB3	SOD-123
SODDB3T	DB3T	SOD-123

MAXIMUM RATING (operating temperature range applies unless otherwise specified)

Parameter	Symbol	Value	UNIT
Power Dissipation	P_D	150	mW
Repetitive peak on-state current $T_p=20\mu s, F=100Hz$	I_{TRM}	2.0	A
Operating Junction and Storage Temperature	T_J, T_{STG}	-40 to +125	°C

SURFACE MOUNT RECTIFIER

SODDB3 / SODDB3T

ELECTRICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

Parameter	Test Condition	Symbol		SODDB3	SODDB3T	UNIT
Repetitive peak on-state current Tp=20us,F=100Hz		I_{TRM}	Min	2		A
Reverse breakdown Voltage	C=22nF	V_{BO}	Min	28	30	V
			TYP	32	32	
			MAX	36	34	
Breakdown Voltage Symmetry	C=22nF	$[+V_{BO1} - -V_{BO2}]$	MAX	± 3	± 2	V
Dynamic Breakdown Voltage	$\Delta I = [I_{BO} \text{ to } I_F = 10mA]$	$ \Delta V \pm $	Min	5	9	V
Output voltage	See FIG.2	V_o	Min	5		V
Breakdown current	C=22nF	I_{BO}	MAX	100	15	uA
Leakage current	$V_B = 0.5V_{BO}$	I_R	MAX	10		uA
Rise time	See diagram 3	tr	MAX	1.5		us

SURFACE MOUNT RECTIFIER

SODDB3 / SODDB3T

TYPICAL CHARACTERISTICS @ $T_a=25^{\circ}\text{C}$ unless otherwise specified

FIG.1--VOLTAGE-CURRENT CHARACTERISTIC CURVE

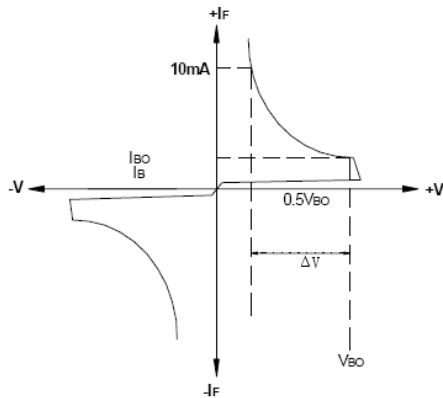


FIG.2--TEST CIRCUIT FOR OUTPUT VOLTAGE

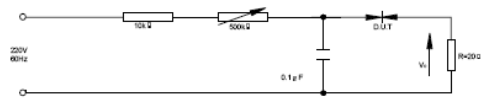


FIG.3-- TEST CIRCUIT SEE FIG.2 ADJUST R FOR $I_P=0.5A$

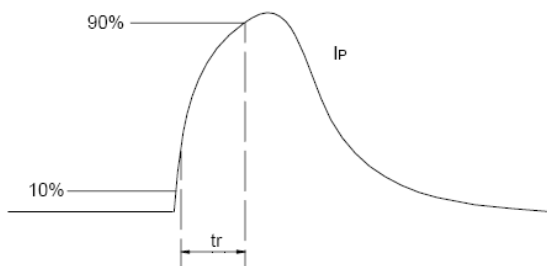


FIG.4--POWER DISSIPATION VERSUS AMBIENT TEMPERATURE (MAXIMUM VALUES)

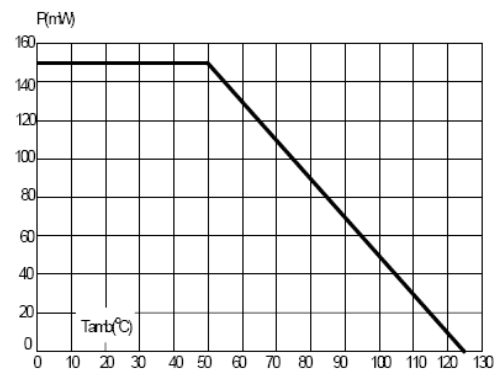


FIG.5--RELATIVE VARIATION OF V_{BO} VERSUS JUNCTION TEMPERATURE(TYPICAL VALUES)

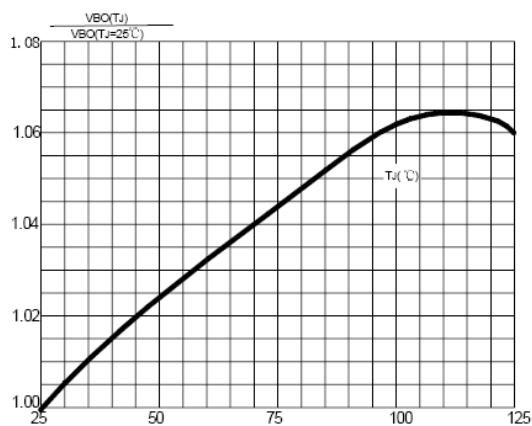
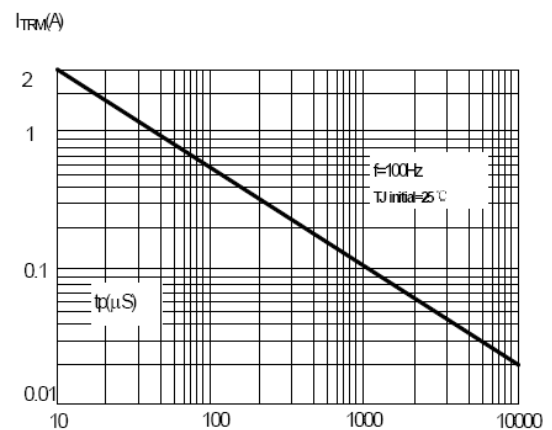


FIG.6--PEAK PULSEE CURRENT VERENT VERSUS PULSE DURATION(MAXIMUM VALUES)



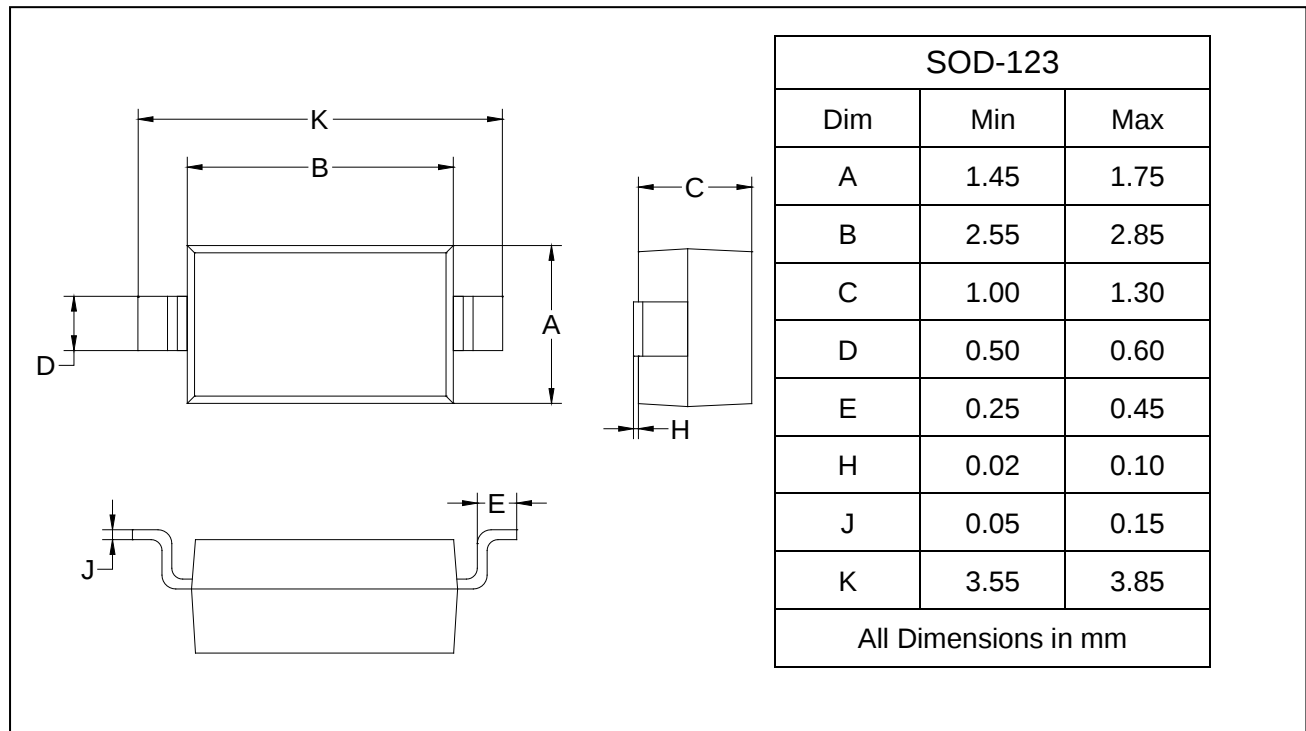
SURFACE MOUNT RECTIFIER

SODDB3 / SODDB3T

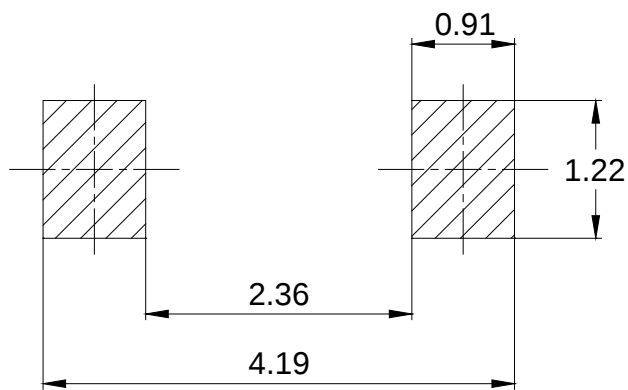
PACKAGE OUTLINE

Plastic surface mounted package

SOD-123



SOLDERING FOOTPRINT



Unit: mm

PACKAGE INFORMATION

Device	Package	Shipping
SODDB3/ SODDB3T	SOD-123	3000pcs / Tape & Reel