

9097250 TOSHIBA (DISCRETE/OPTO)

67C 09305 D T-25-05

1S2093

Silicon Planar Type

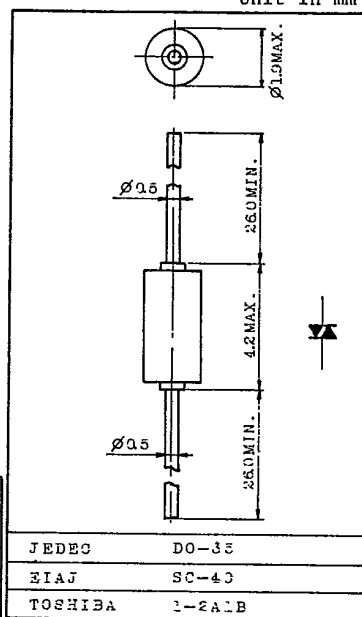
Trigger Diode

THYRISTOR, TRIAC TRIGGER APPLICATIONS.

FEATURES:

- . A symmetrical negative resistance characteristics in positive and negative direction, and a symmetrical switch characteristics for applied voltage with positive and negative.
- . The 1S2093 is intended for use in SCR or TRIAC phase control circuit for gate trigger and it makes circuit composition inexpensive.
- . Not only for thyristor trigger circuit but for trigger in general electronic circuits, the 1S2093 can compose block Oscillation.
- . Small package sealed hermetically with glass.

Unit in mm

MAXIMUM RATINGS ($T_a=25^\circ\text{C}$)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Repetitive Peak Current (Note 1)	I_{TRM}	2	A
Junction Temperature	T_j	125	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	-25 ~ 125	$^\circ\text{C}$

Note 1 : $t=10\mu\text{s}$, $f=50\text{Hz}$, $T_a=25^\circ\text{C}$

Weight : 0.14g

ELECTRICAL CHARACTERISTICS ($T_a=25^\circ\text{C}$)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Breakover Voltage	$V_{(BO)}$	Fig. 2	26	-	36	V
Breakover Current	$I_{(BO)}$	Fig. 2	-	-	50	μA
Peak Output Voltage	V_{OM}	$R_L=20\Omega$, $C=0.1\mu\text{F}$, Fig.1	4.5	-	-	V
Breakover Voltage Temperature Coefficient	α	$T_a=-25 \sim 125^\circ\text{C}$	-	0.1	-	$\%/^\circ\text{C}$
Breakover Voltage Symmetry	$ V_{(BO)1} $ - $ V_{(BO)2} $	Fig. 2	-	-	3.6	V

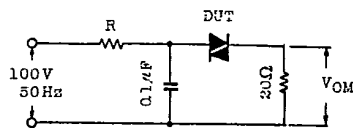


Fig. 1 PEAK OUTPUT VOLTAGE TEST CIRCUIT

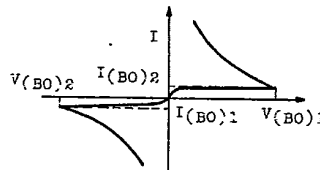


Fig. 2 V-I ELECTRICAL CHARACTERISTICS

TOSHIBA CORPORATION