

BI-DIRECTIONAL TRIODE THYRISTOR (TRIAC)

TOSHIBA (DISCRETE/OPTO)

39 DE 9097250 0002312 4

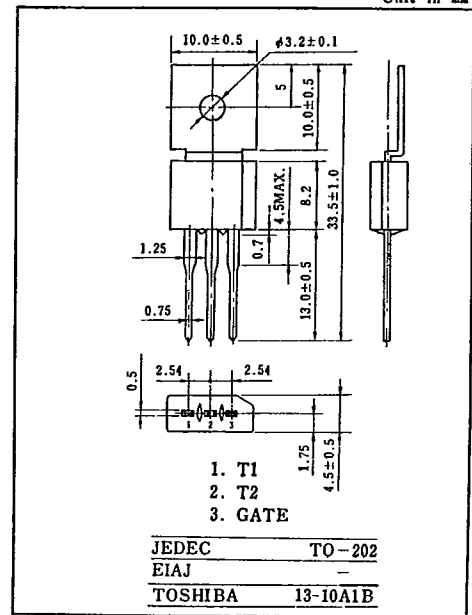
SM2G41

400V 2A

Unit in mm

MAXIMUM RATINGS

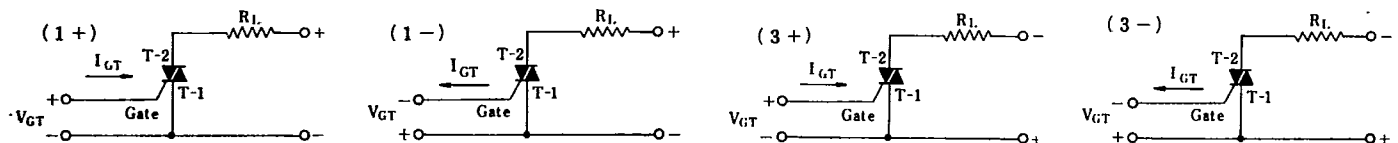
CHARACTERISTIC	SNMBOL	RATING	UNIT
Peak Off-State Voltage	SM2B41	100	V
	SM2D41	200	
	SM2G41	400	
R.M.S On-State Current $T_c=70^\circ\text{C}$	$I_T(\text{RMS})$	2.0	A
Peak One Sycle Surge On-State Current (Non-Repetitive)	I_{TSM}	13 (60Hz)	A
		12 (50Hz)	
Peak Gate Power Dissipation	P_{GM}	3	W
Average Gate Power Dissipation	$P_{\text{G(AV)}}$	0.3	W
Junction Temperature	T_j	-25~110	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	-25~110	$^\circ\text{C}$

**ELECTRICAL CHARACTERISTICS**

CHARACTERISTIC	SYMBOL	CONDITION	MIN.	TYP.	MAX.	UNIT
Repetitive Peak Off-State Current	I_{DRM}	$V_{\text{DRM}}=\text{Rated}, T_j=110^\circ\text{C}$	—	—	100	μA
** Gate Trigger Current	(1+)	$V_D=12\text{V}, R_L=20\Omega, T_c=25^\circ\text{C}$	—	—	15	mA
	(1-)		—	—	15	
	(3+)		—	30	—	
	(3-)		—	—	15	
** Gate Trigger Voltage	(1+)	$V_D=12\text{V}, R_L=20\Omega, T_c=25^\circ\text{C}$	—	—	2.3	V
	(1-)		—	—	2.3	
	(3+)		—	1.8	—	
	(3-)		—	—	2.3	
Gate Non-Triggre Voltage	V_{GD}	$V_D=\text{Rated}, T_c=110^\circ\text{C}$	0.2	—	—	V
Peak On-State Voltage	V_{TM}	$I_{\text{TM}}=6\text{A}, T_c=25^\circ\text{C}$	—	—	2.6	V
Holding Current	I_{H}	$R_L=100\Omega, T_c=25^\circ\text{C}$	—	—	25	mA
Thermal Resistance *	$R_{\text{th(j-c)}}$	AC	—	—	12	$^\circ\text{C/W}$

* Junction to Case.

** Principal Voltage-Current Characteristics as follows.

**GATE TRIGGERING CHARACTERISTICS**