

BI-DIRECTIONAL TRIODE THYRISTOR (TRIAC)

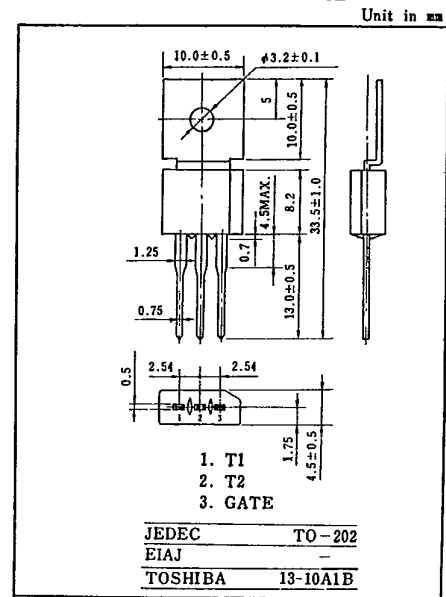
TOSHIBA (DISCRETE/OPTO)

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SM2G41 400V 2A

MAXIMUM RATINGS

CHARACTERISTIC	SYMBOL	RATING	UNIT
Peak Off-State Voltage	SM2B41	100	V
	SM2D41	200	
	SM2G41	400	
R.M.S On-State Current $T_c=70^\circ\text{C}$	$I_{T(RMS)}$	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	$P_{G(AV)}$	0.3	W
Junction Temperature	T_j	-25~110	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	-25~110	$^\circ\text{C}$

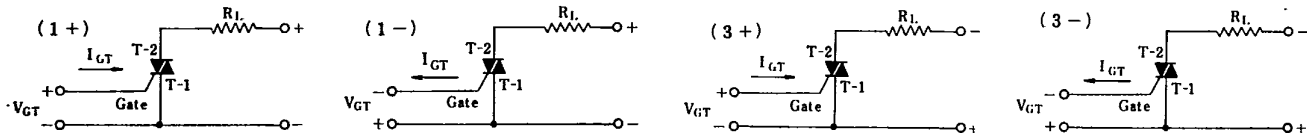


ELECTRICAL CHARACTERISTICS

CHARACTERISTIC	SYMBOL	CONDITION	MIN.	TYP.	MAX.	UNIT
Repetitive Peak Off-State Current	I_{DRM}	$V_{DRM} = \text{Rated}, T_j = 110^\circ\text{C}$	-	-	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}	$I_{TM} = 6\text{A}, T_c = 25^\circ\text{C}$	-	-	2.6	V
Holding Current	I_H	$R_L = 100\Omega, T_c = 25^\circ\text{C}$	-	-	25	mA
Thermal Resistance *	$R_{th(j-c)}$	AC	-	-	12	$^\circ\text{C}/\text{W}$

* Junction to Case:

** Principal Voltage-Current Characteristics as follows.



GATE TRIGGERING CHARACTERISTICS

