JST41TE Series 41A TRIACs

Rev.1.1 June 19 2023

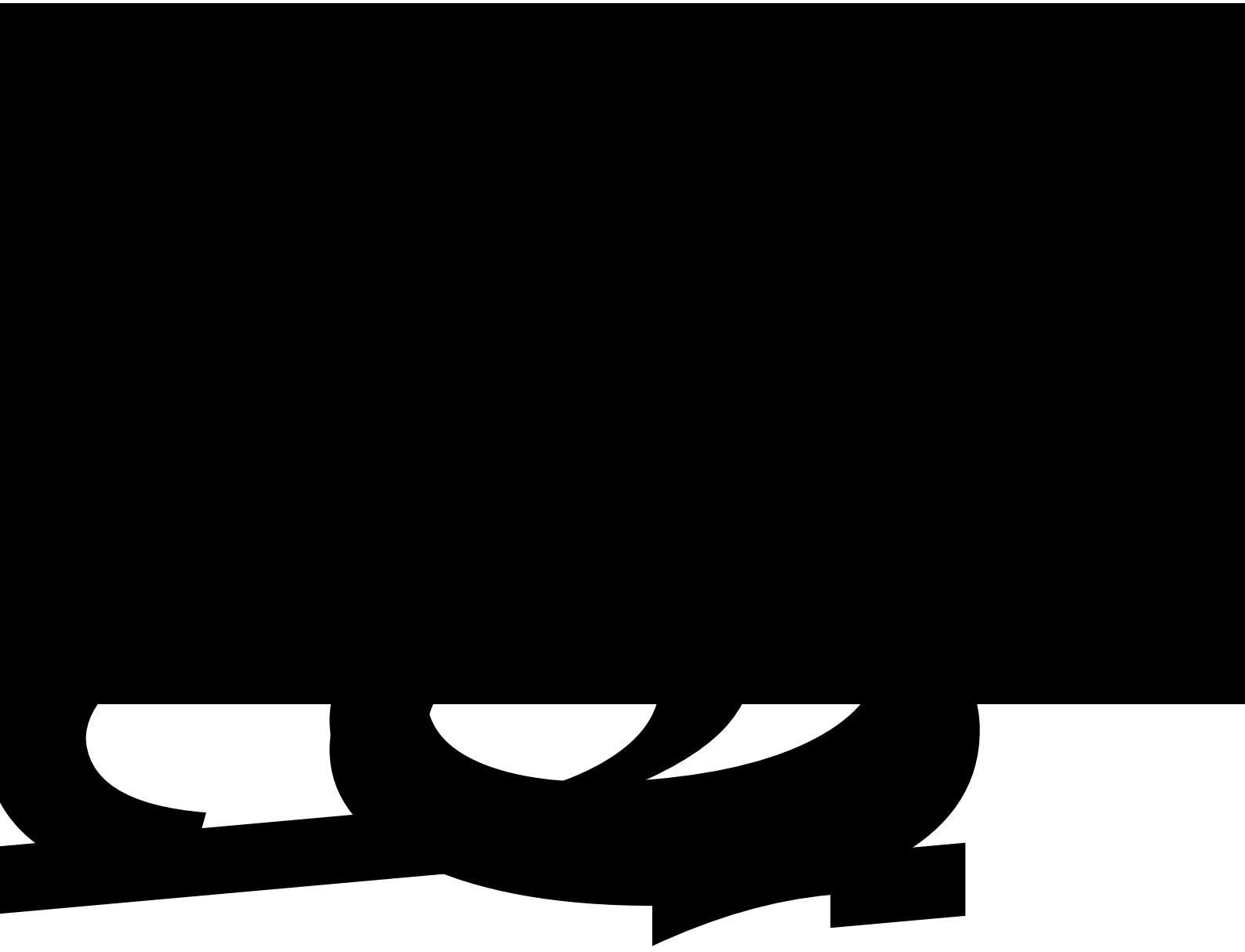
JST41TE series triacs, with high ability to withstand the shock loading of large current, provide high dv/dt rate with strong resistance to electromagnetic interface. With high commutation performances, 3 quadrants products especially recommended for use on inductive load.

Symbol	Value	Unit

(T_j=25 unless otherwise specified)

3 Quadrants

Symbol	Test Condition	Quadrant		Value	Unit
I_{GT}	V_D =12V R_L =33Ω	- -	MAX	50	mA
V_{GT}		- -	MAX	1.3	V
V_{GD}	V_D =V_{DRM} T_j =125 R } ¯ }				



Symbol	Parameter		Value(MAX)	Unit
V_{TM}	I_{TM} =60A t_P=380μs	T_j=25	1.55	V
V_{TO}	Threshold voltage	T_j=125	0.85	V
R_d	Dynamic resistance	T_j=125	9	mΩ
I_{DRM}	V_D =V_{DRM} V_R =V_{RRM}	T_j=25	10	μA
I_{RRM}		T_j=125	5	mA

Symbol	Parameter	Value	Unit

R " X` Q

FIG.1 Maximum power dissipation versus RMS on-state current

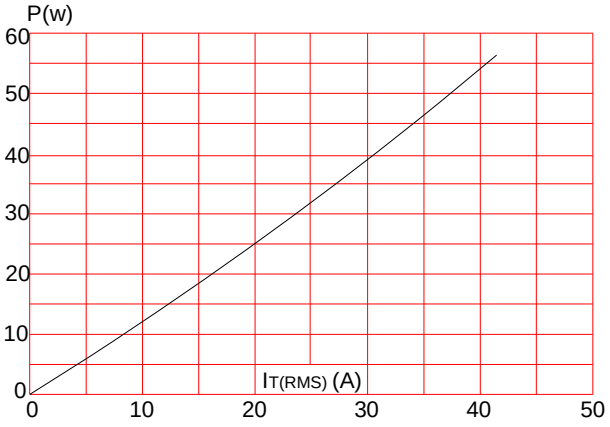


FIG.2: RMS on-state current versus case temperature

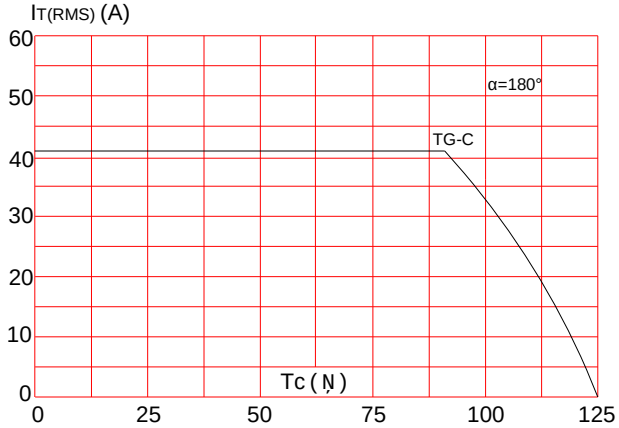


FIG.3: Surge peak on-state current versus number of cycles

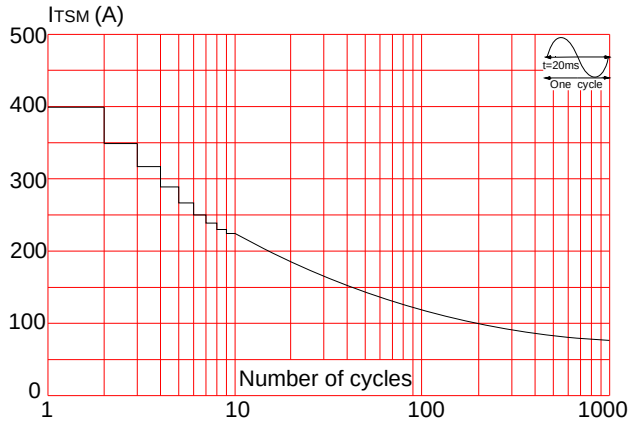


FIG.4: On-state characteristics (maximum values)

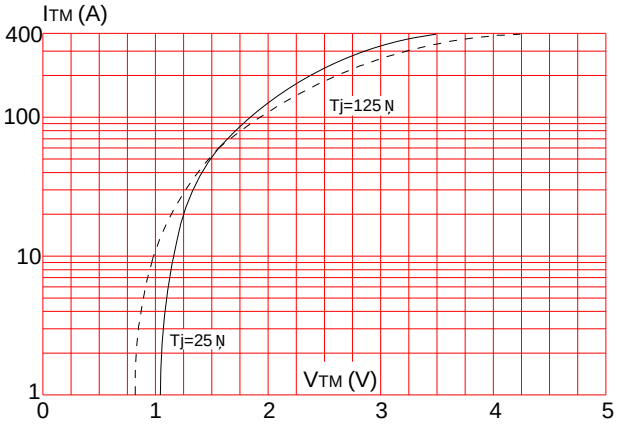


FIG.5: Non-repetitive surge peak on-state current for a sinusoidal pulse with width tp<20ms, and corresponging value of I^2t(dI/dt < 50A/μs)

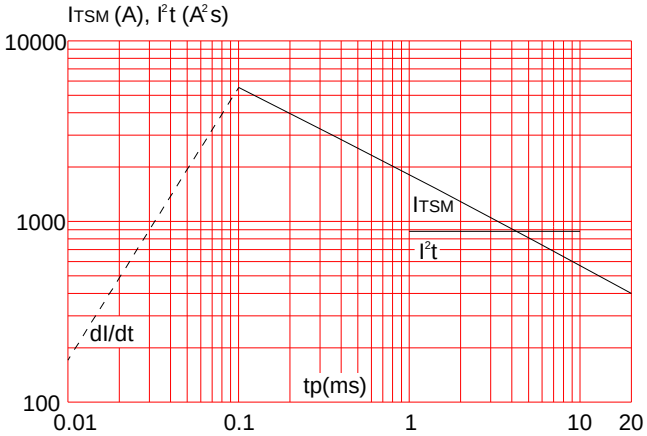
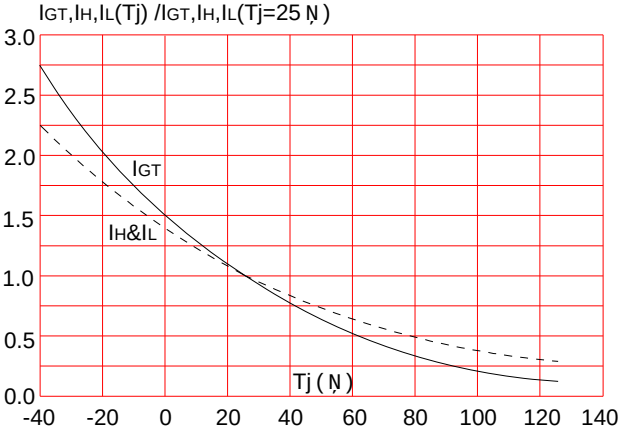


FIG.6: Relative variations of gate trigger current, holding current and latching current versus junction temperature



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