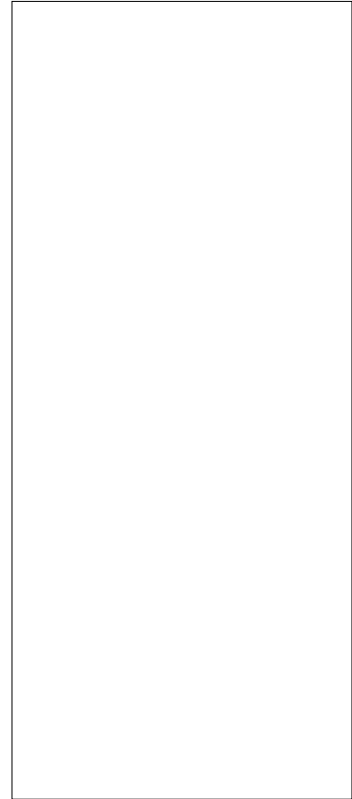




JCT812TA silicon controlled rectifier is specifically designed for medium power switching and phase control applications. High current density due to mesa technology; SIPOS and Glass Passivation technology used has reliable operation up to 125 °C junction temperature. Low I_{GT} parts available. From all three terminals to external heatsink, JCT812TA provides a rated insulation voltage of 2500 V_{RMS}, complying



Peak gate current ($t_p=20 \text{ s}$, $T_j=125 \text{ }^\circ\text{C}$)	I_{GM}	4	A
Average gate power dissipation ($T_j=125 \text{ }^\circ\text{C}$)	$P_{G(AV)}$	1	W
Peak gate power	P_{GM}	10	W
Peak pulse voltage ($T_j=25 \text{ }^\circ\text{C}$; non-repetitive,off-state;FIG.7)	V_{pp}	0.5	kV

($T_j=25 \text{ }^\circ\text{C}$ unless otherwise specified)

Symbol	Test Condition	Value			Unit
		MIN.	TYP.	MAX.	
I_{GT}	$V_D=12V \ R_L=33$	-	-	5	mA
V_{GT}		-	-	1	V
V_{GD}	$V_D=V_{DRM} \ T_j=125 \text{ }^\circ\text{C} \ R_L=3.3K$	0.2	-	-	-- G-

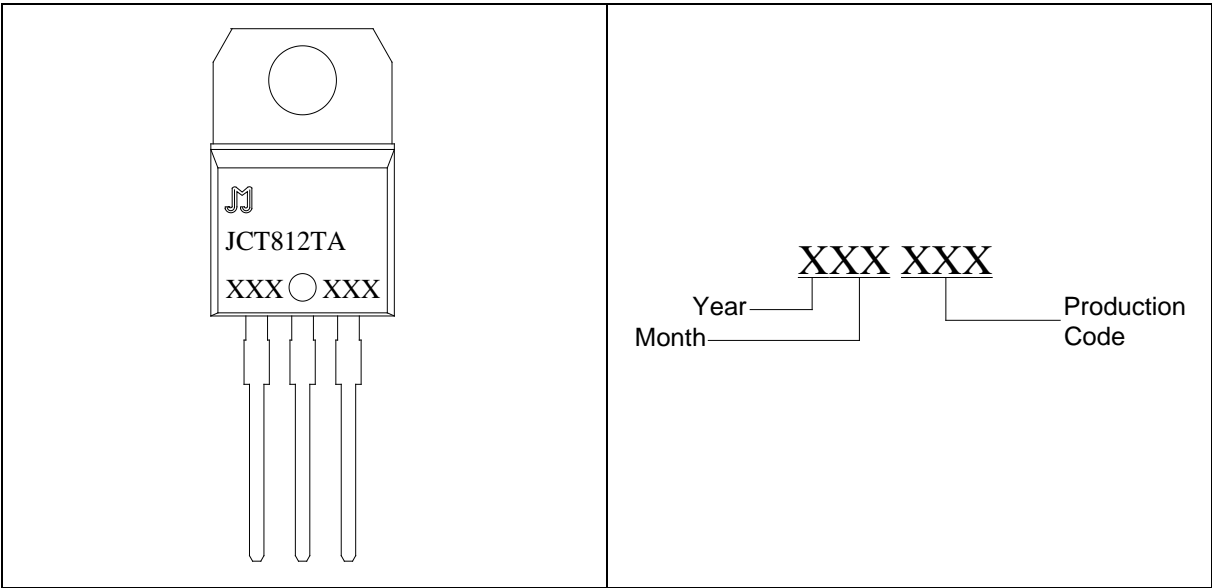
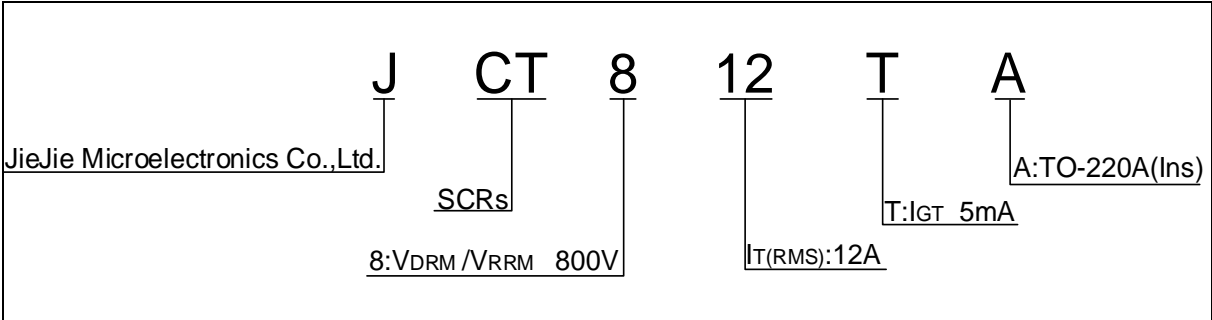


FIG.1 Maximum power dissipation versus RMS on-state current

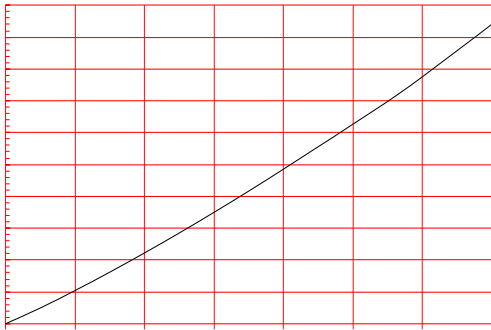


FIG.2: RMS on-state current versus case temperature

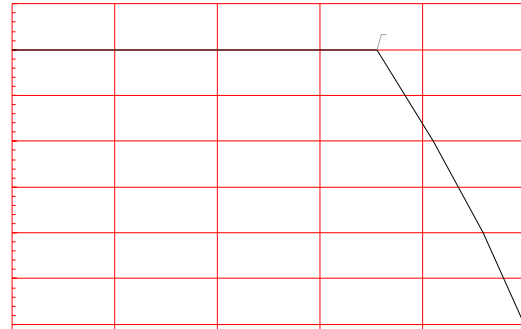
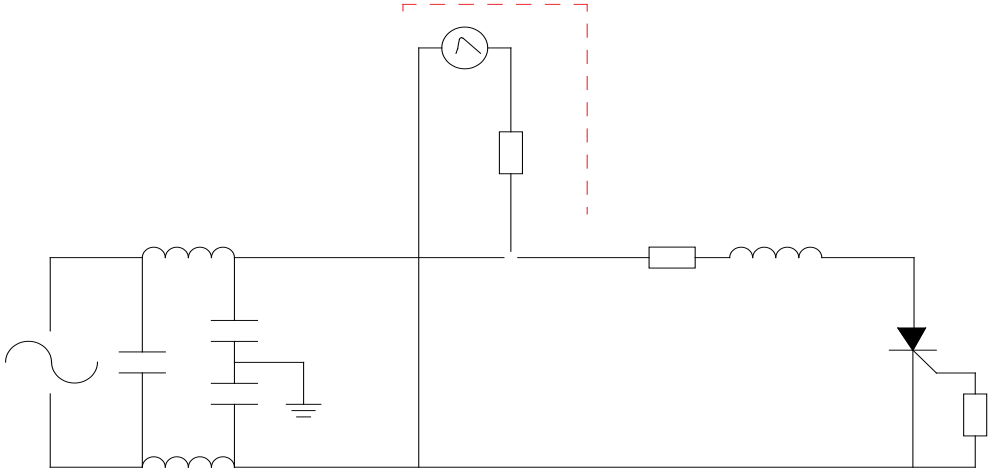


FIG.3: Surge peak on-state current versus number of cycles

FIG.4: On-state characteristics

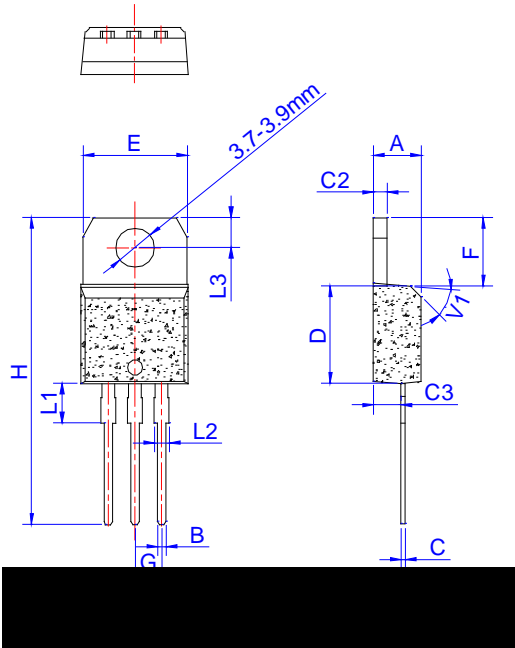
FIG.7 Test circuit for inductive and resistive loads to IEC-61000-4-5 standards.



Order code	Voltage V_{DRM}/V_{RRM} (V)	IGT(mA)	Package	Base qty. (pcs)	Delivery mode
JCT812TA	800	5	TO-220A(Ins)	50	Tube

Document Revision History

Date	Revision	Changes
Apr.13, 2023	A.1.0	Last update



Dimensions

Ref.	Millimeters	Inches
Min.	T 0wFQ...•7IÂÂ Â "	's\$'A Au †0

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