



JST139C-800D 16A TRIAC

Rev. A. 1.1

DESCRIPTION:

The JST 139C-800D triac is suitable for general purpose AC switching. It can be used as an ON/OFF function in applications such as heating regulation, induction motor starting circuits, for phase control operation in light dimmers, motor speed controller. From T2 terminals to external heatsink. Package TO-220C is RoHS compliant.

MAIN FEATURES

ABSOLUTE MAXIMUM RATINGS

Parameter	Symbol	Value	Unit
Storage junction temperature range	T <sub>stg</sub>	-40~150	
Operating junction temperature range	T <sub>j</sub>	-40~125	
Repetitive peak off-state voltage (T=25 °C)	V <sub>DRM</sub>	800	V
Repetitive peak reverse voltage (T=25 °C)	V <sub>RRM</sub>	800	V
RMS on-state current (T=95 °C)	I <sub>T(RMS)</sub>	16	A
Non repetitive surge peak on-state current (full cycle, t=20ms, T=25 °C)	I <sub>TSM</sub>	140	A
Non repetitive surge peak on-state current (full cycle, t <sub>p</sub> =16.6ms, T=25 °C)		154	
I <sup>2</sup> t value for fusing (t=10ms, T=25 °C)	I <sup>2</sup> t	98	A <sup>2</sup> s

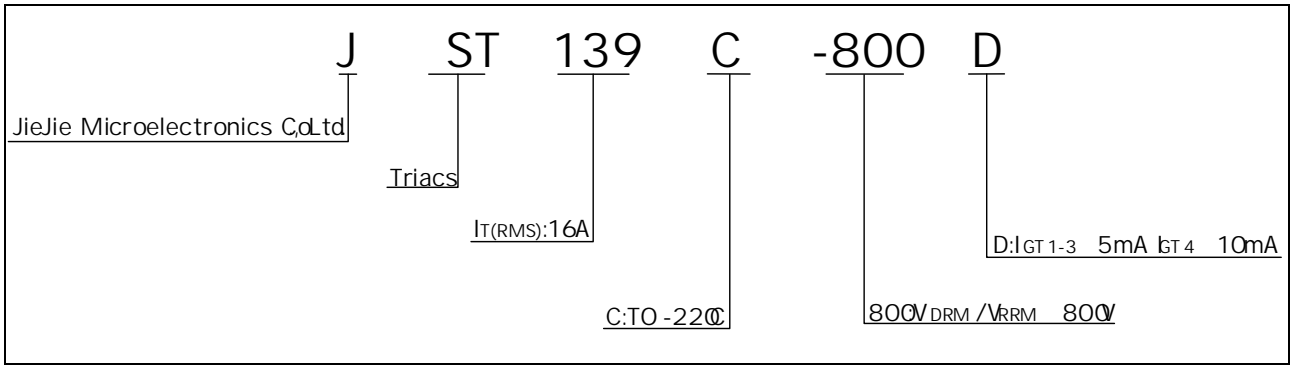
Critical rate of rise of on-state current (I<sub>G</sub>=20mA, f=100Hz, T<sub>j</sub>=125 °C)

- - 5 0 w 1

ELECTRICAL CHARACTERISTICS (T<sub>j</sub>=25 unless otherwise specified)

Symbol	Test Condition	Quadrant	Value		Unit
I <sub>GT</sub>	V <sub>D</sub> =12V R <sub>L</sub> =33	- -	MAX.	5	mA
				10	
V <sub>GT</sub>		ALL	MAX.	1	V
V <sub>GD</sub>	V <sub>D</sub> =V <sub>DRM</sub> T <sub>j</sub> =125 R <sub>L</sub> =3.3k	ALL	MIN.	0.2	V
I <sub>L</sub>	I <sub>G</sub> =1.2I <sub>GT</sub>	- -	MAX.	15	mA
				20	

ORDERING INFORMATION



MARKING

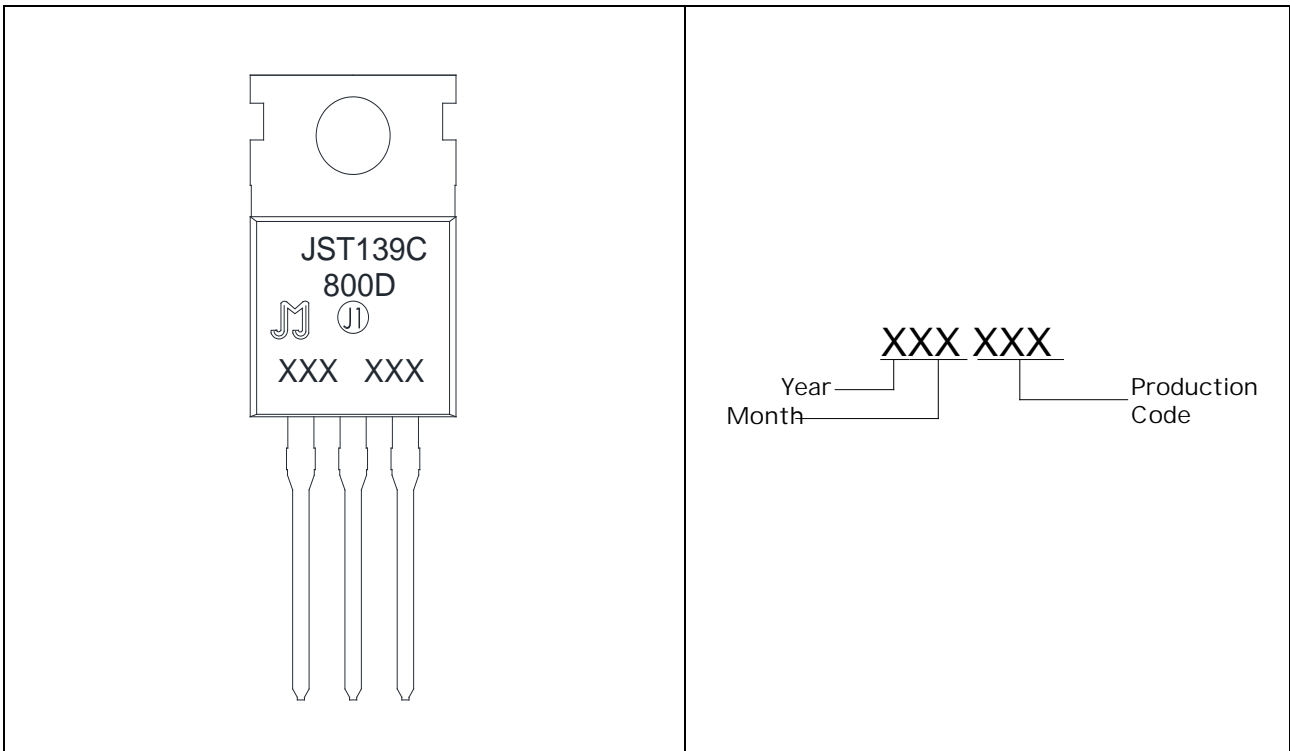
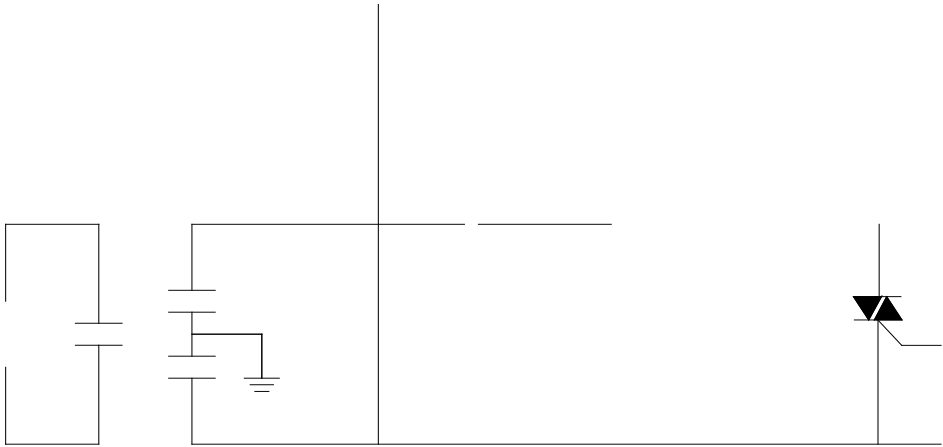


FIG.1 : Maximum power dissipation versus RMS on-state current

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

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





PACKAGE MECHANICAL DATA



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