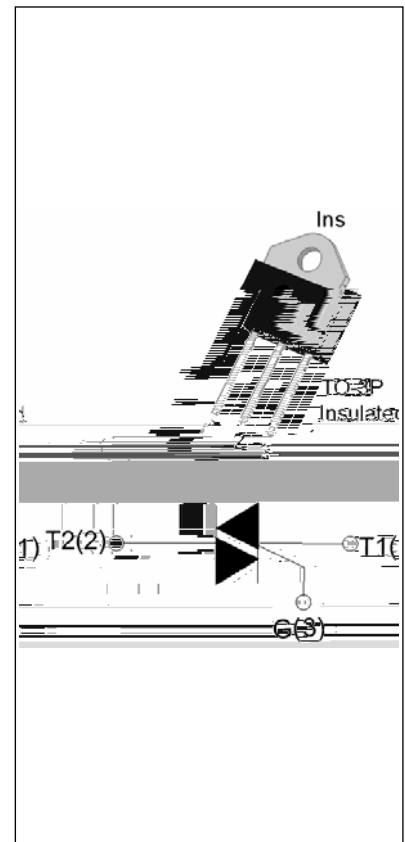


The JST30Z-1600BW triac is suitable for general purpose AC switching. It can be used as an ON/OFF function in applications such as heating regulation, induction motor starting circuits, for phase control operation in light dimmers, motor speed controllers. JST30Z-1600BW snubberless triac is especially recommended for use on inductive loads. By using an internal ceramic pad, JST30Z-1600BW provides a rated insulation voltage of 2500 VRMS, complying with UL standards (File ref: E252906). Package TO-3P is RoHS compliant.



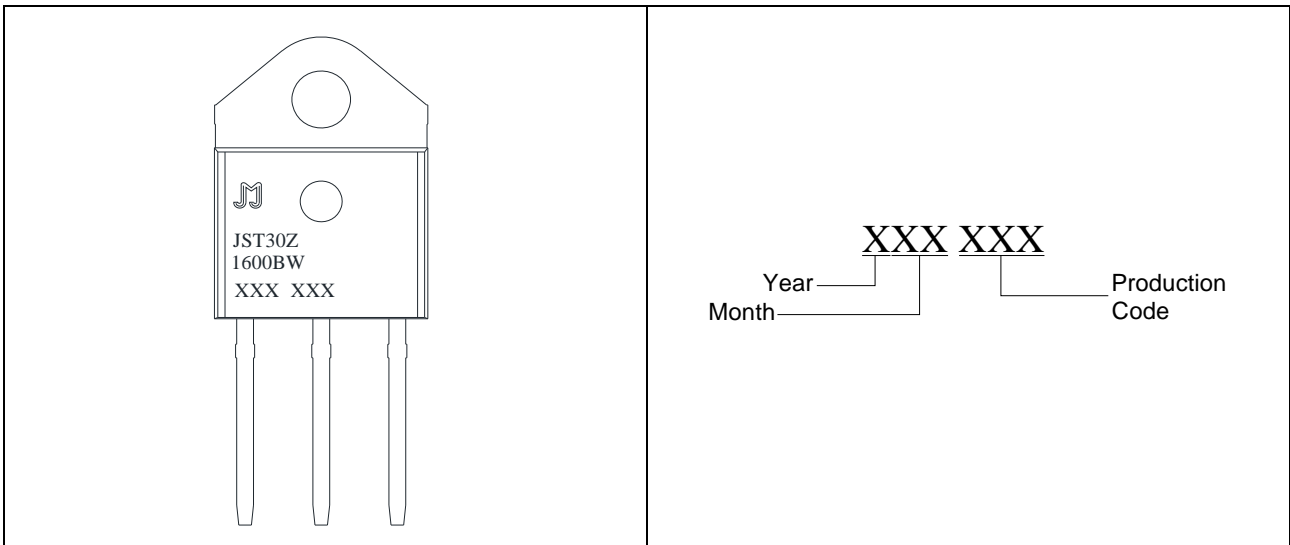
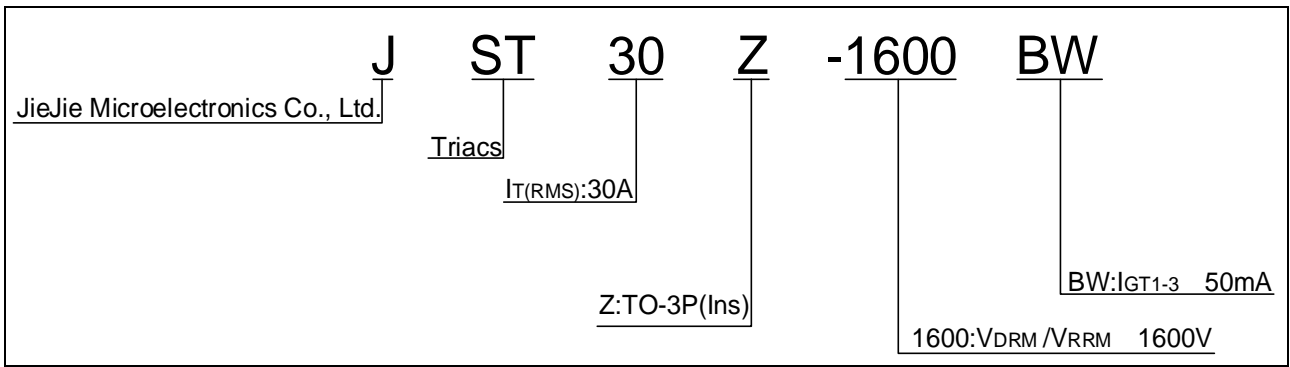
Symbol	Value	Unit
$I_{T(RMS)}$	30	A
$V_{DRM}/V_{RRM}$	1600	V
$I_{GT} / /$	50/50/50	mA

Storage junction temperature range	$T_{stg}$	-40-150	
Operating junction temperature range	$T_j$	-40-125	
Repetitive peak off-state voltage ( $T_j=25^\circ\text{C}$ )	$V_{DRM}$	1600	V
Repetitive peak reverse voltage ( $T_j=25^\circ\text{C}$ )	$V_{RRM}$	1600	V
RMS on-state current ( $T_c = 72^\circ\text{C}$ )	$I_{T(RMS)}$	30	A
Non repetitive surge peak on-state current (full cycle, $t_p=20\text{ms}$ , $T_j=25^\circ\text{C}$ )	$I_{TSM}$	300	A
Non repetitive surge peak on-state current (full cycle, $t_p=16.6\text{ms}$ , $T_j=25^\circ\text{C}$ )		330	
$I^2t$ value for fusing ( $t_p=10\text{ms}$ , $T_j=25^\circ\text{C}$ )	$I^2t$	450	$\text{A}^2\text{s}$
Critical rate of rise of on-state current ( $I_G=2 \cdot I_{GT}$ , $f=100\text{Hz}$ , $T_j=125^\circ\text{C}$ )	$di/dt$	100	$\text{A}/\mu\text{s}$
Peak gate current ( $t_p=20\mu\text{s}$ , $T_j=125^\circ\text{C}$ )	$I_{GM}$	4	A



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Average gate power dissipation ( $T_j=125$  ) P





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Maximum power dissipation versus RMS  
on-state current

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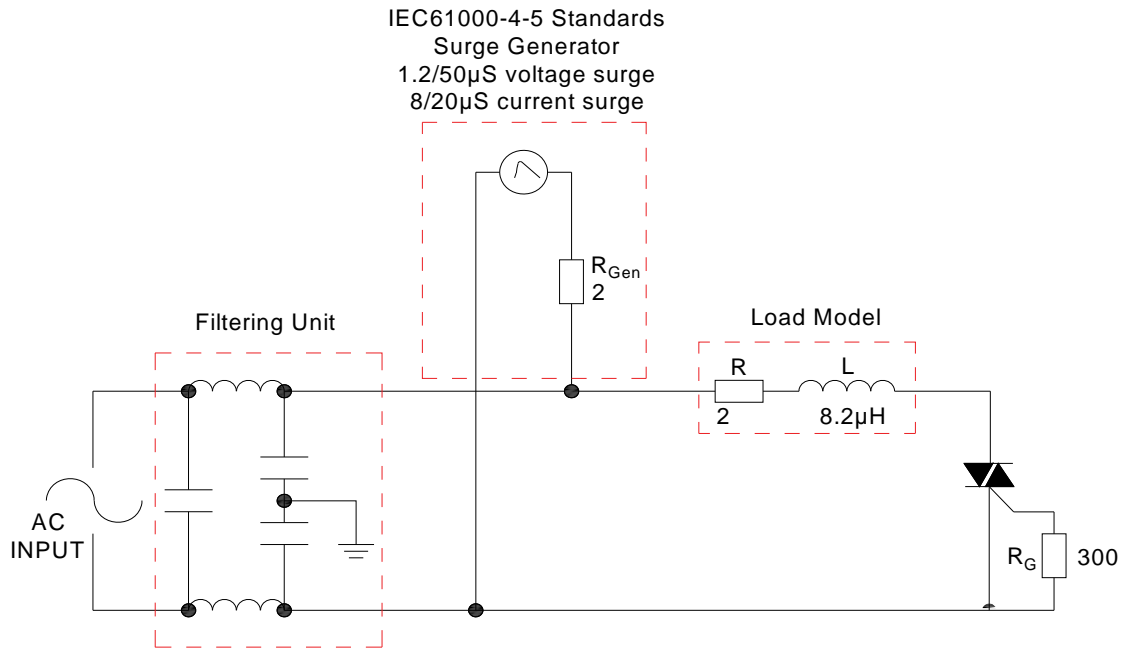
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RMS on-state current versus case  
temperature



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



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Date	Revision	Changes
Apr. 11, 2023	A.1.0	Last updated
Oct. 16, 2025	A.1.1	Revise PACKAGE MECHANICAL DATA






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