



## JST26Z 25A TRIACs

Rev.1.0

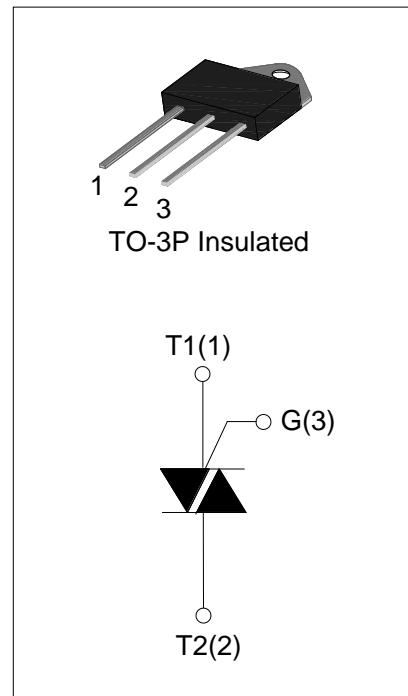
## DESCRIPTION:

JST26Z 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.

JST26Z provide insulation voltage rated at 2500V RMS from all three terminals to external heatsink complying with UL standards (File ref: E252906).

## MAIN FEATURES

Symbol	Value	Unit
$I_{T(RMS)}$	25	A
$V_{DRM}/V_{RRM}$	600 and 800 and 1200	V



## ABSOLUTE MAXIMUM RATINGS

Parameter	Symbol	Value	Unit
Storage junction temperature range	$T_{stg}$	-40-150	°C
Operating junction temperature range	$T_j$	-40-125	°C
Repetitive peak off-state voltage ( $T_j=25\text{ }^\circ\text{C}$ )	$V_{DRM}$	600/800/1200	V
Repetitive peak reverse voltage ( $T_j=25\text{ }^\circ\text{C}$ )	$V_{RRM}$	600/800/1200	V
Non repetitive surge peak Off-state voltage	$V_{DSM}$	$V_{DRM}+100$	V
Non repetitive peak reverse voltage	$V_{RSM}$	$V_{RRM}+100$	V
RMS on-state current TO-3P(Ins) ( $T_C=100\text{ }^\circ\text{C}$ )	$I_{T(RMS)}$	25	A
Non repetitive surge peak on-state current (full cycle, $F=50\text{Hz}$ )	$I_{TSM}$	250	A
$I^2t$ value for fusing ( $t_p=10\text{ms}$ )	$I^2t$	340	$\text{A}^2\text{s}$
Critical rate of rise of on-state current ( $I_G=2 \times I_{GT}$ )	$dl/dt$	50	$\text{A}/\mu\text{s}$
Peak gate current	$I_{GM}$	4	A
Average gate power dissipation	$P_{G(AV)}$	1	W

Peak gate power	$P_{GM}$	10	W
-----------------	----------	----	---

**ELECTRICAL CHARACTERISTICS ( $T_j=25^\circ C$  unless otherwise specified)** $V_{DRM}/V_{RRM}$ : 600/800V

Symbol	Test Condition	Quadrant	JST26Z-600/800V			Unit
			BW	CW		
$I_{GT}$	$V_D=12V R_L=33\Omega$	I - II - III	MAX	50	35	mA
$V_{GT}$		I - II - III	MAX	1.3		V
$V_{GD}$	$V_D=V_{DRM} T_j=125^\circ C R_L=3.3K\Omega$	I - II - III	MIN	0.2		V
$I_L$	$I_G=1.2I_{GT}$	I - III	MAX	80	70	mA
		II		100	80	
$I_H$	$I_T=100mA$		MAX	75	50	mA
dV/dt	$V_D=2/3V_{DRM}$ Gate Open $T_j=125^\circ C$		MIN	1000	500	V/ $\mu$ s

 $V_{DRM}/V_{RRM}$ : 1200V

Symbol	Test Condition	Quadrant	JST26Z-1200V			Unit
			BW	CW		
$I_{GT}$	$V_D=12V R_L=33\Omega$	I - II - III	MAX	50	35	mA
$V_{GT}$		I - II - III	MAX	1.5		V
$V_{GD}$	$V_D=V_{DRM} T_j=125^\circ C R_L=3.3K\Omega$	I - II - III	MIN	0.2		V
$I_L$	$I_G=1.2I_{GT}$	I - III	MAX	90	70	mA
		II		100	80	
$I_H$	$I_T=100mA$		MAX	80	60	mA
dV/dt	$V_D=2/3V_{DRM}$ Gate Open $T_j=125^\circ C$		MIN	1500	1000	V/ $\mu$ s

**STATIC CHARACTERISTICS**

Symbol	Parameter		Value(MAX)	Unit
$V_{TM}$	$I_{TM}=35A$	$t_p=380\mu s$	$T_j=25^\circ C$	1.5
$I_{DRM}$	$V_D=V_{DRM}$	$V_R=V_{RRM}$	$T_j=25^\circ C$	5
$I_{RRM}$			$T_j=125^\circ C$	3

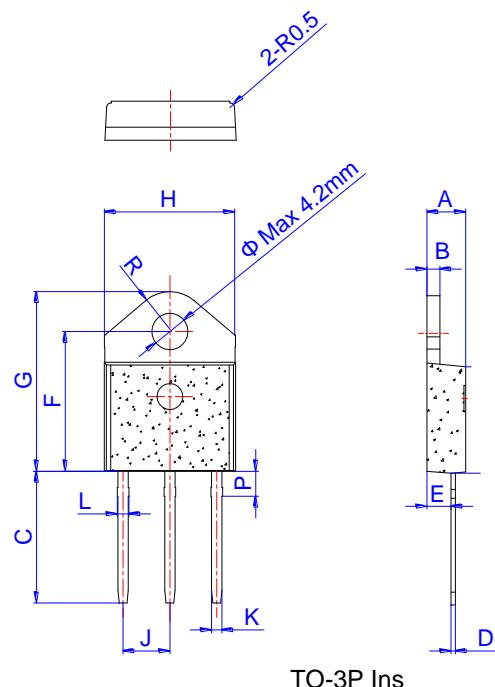
## THERMAL RESISTANCES

Symbol	Parameter		Value	Unit
$R_{th(j-c)}$	junction to case(AC)	TO-3P(Ins)	0.8	°C/W

## ORDERING INFORMATION

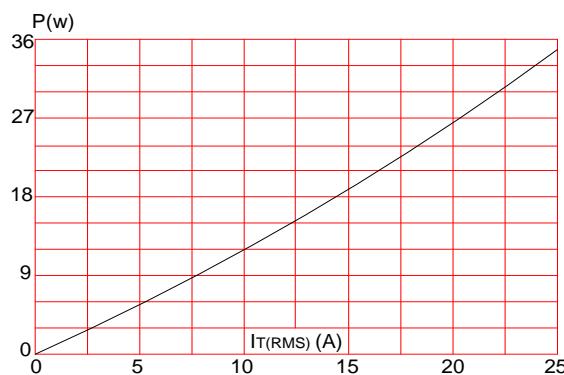
J	ST	26	Z	-600	BW
JieJie Microelectronics Co.,Ltd					BW:IGT3≤50mA CW:IGT3≤35mA
					IT(RMS):25A
					Z:TO-3P(Ins)
					600:V <sub>DRM</sub> / V <sub>RRM</sub> ≥ 600V 800:V <sub>DRM</sub> / V <sub>RRM</sub> ≥ 800V 1200:V <sub>DRM</sub> / V <sub>RRM</sub> ≥ 1200V

## PACKAGE MECHANICAL DATA

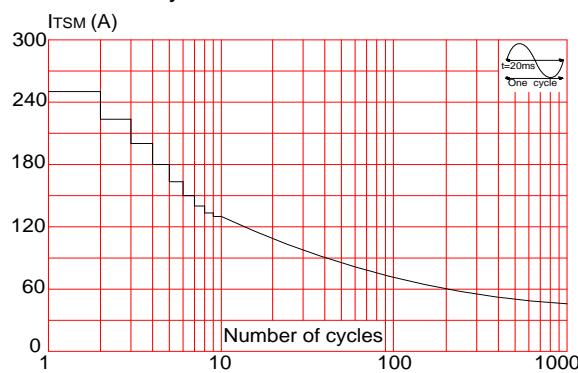


Ref.	Dimensions					
	Millimeters			Inches		
	Min.	Typ.	Max.	Min.	Typ.	Max.
A	4.40		4.60	0.173		0.181
B	1.45		1.55	0.057		0.061
C	14.35		15.60	0.565		0.614
D	0.50		0.70	0.020		0.028
E	2.70		2.90	0.106		0.114
F	15.80		16.50	0.622		0.650
G	20.40		21.10	0.803		0.831
H	15.10		15.50	0.594		0.610
J	5.40		5.65	0.213		0.222
K	1.10		1.40	0.043		0.055
L	1.35		1.50	0.053		0.059
P	2.80		3.00	0.110		0.118
R		4.35			0.171	

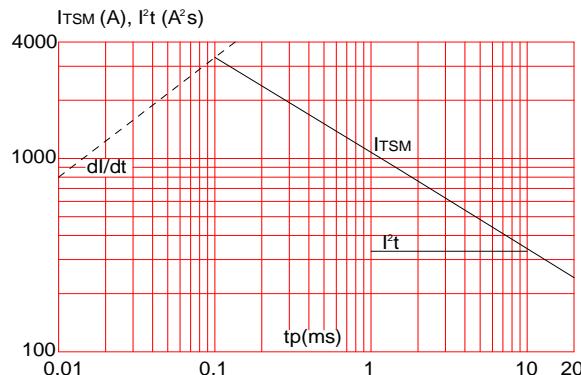
**FIG.1:** Maximum power dissipation versus RMS on-state current



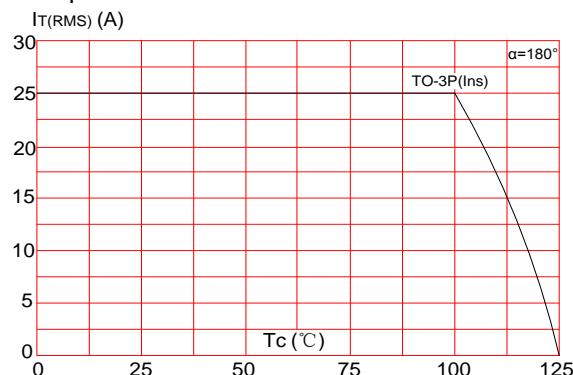
**FIG.3:** Surge peak on-state current versus number of cycles



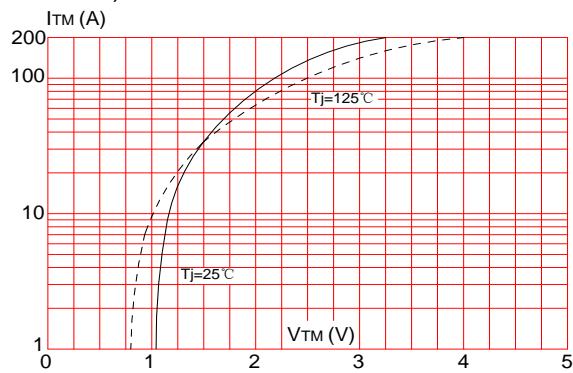
**FIG.5:** Non-repetitive surge peak on-state current for a sinusoidal pulse with width  $t_p < 10\text{ms}$ , and corresponding value of  $I^2t$  ( $dI/dt < 50\text{A}/\mu\text{s}$ )



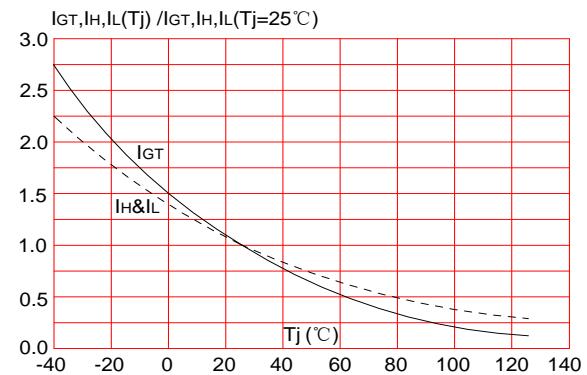
**FIG.2:** RMS on-state current versus case temperature



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



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



Information furnished in this document is believed to be accurate and reliable. However, Jiangsu JieJie Microelectronics Co.,Ltd assumes no responsibility for the consequences of use without consideration for such information nor use beyond it. Information mentioned in this document is subject to change without notice, apart from that when an agreement is signed, Jiangsu JieJie complies with the agreement. Products and information provided in this document have no infringement of patents. Jiangsu JieJie assumes no responsibility for any infringement of other rights of third parties which may result from the use of such products and information. This document is the first version which is made in 14-Jan.-2016. This document supersedes and replaces all information previously supplied.

 is a registered trademark of Jiangsu JieJie Microelectronics Co.,Ltd.

Copyright ©2016 Jiangsu JieJie Microelectronics Co.,Ltd. Printed All rights reserved.