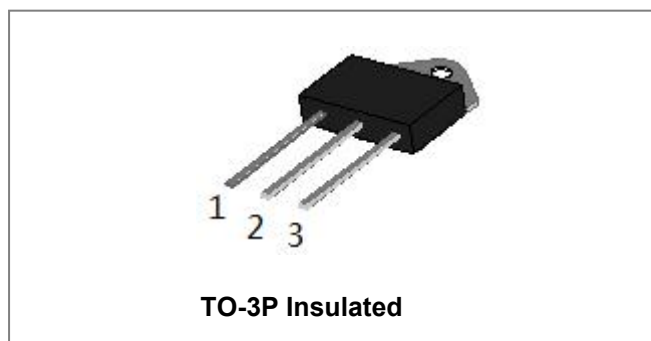
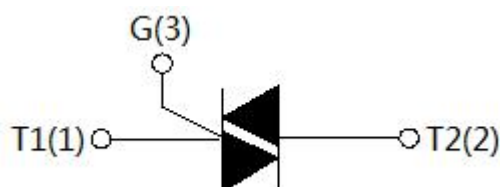


SST26 Series 25A TRIACs



Circuit Diagram



Description

With high ability to withstand the shock loading of large current, SST26Z 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.

Maximum Ratings:

Characteristics	Symbol	Condition	Max.	Units
Storage junction temperature range	T_J	-	-40 to +125	°C
Operating junction temperature range	T_{stg}	-	-40 to +150	°C
Repetitive peak off-state voltage	V_{DRM}	-	800	V
Repetitive peak reverse voltage	V_{RRM}	-	800	V
Non repetitive 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	$I_{(TRMS)}$	TO-3P(Ins)($T_C=100^{\circ}C$)	25	A
Non repetitive surge peak on-state current (full cycle, F=50Hz)	I_{TSM}	-	250	A
I^2t value for fusing ($t_p=10ms$)	I^2t	-	340	A ² s
Critical rate of rise of on-state current ($I_G=2 \times I_{GT}$)	di/dt	-	50	A/ μs
Peak gate current	I_{GM}	-	4	A
Average gate power dissipation	P_{GM}	-	1	W
Peak gate power	$P_{G(AV)}$	-	10	W

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

Symbol	Test Condition	Quadrant		Value		Unit
				BW	CW	
I_{GT}	$V_D=12\text{V } R_L=33\Omega$	I - II -III	MAX	50	35	mA
V_{GT}		I - II -III	MAX	1.3		V
V_{GD}	$V_D=V_{DRM} T_j=125^{\circ}\text{C } R_L=3.3\text{K}\Omega$	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	$I_T=100\text{mA}$		MAX	75	50	mA
dV/dt	$V_D=2/3V_{DRM}$ Gate Open $T_j=125^{\circ}\text{C}$		MIN	1000	500	V/ μs

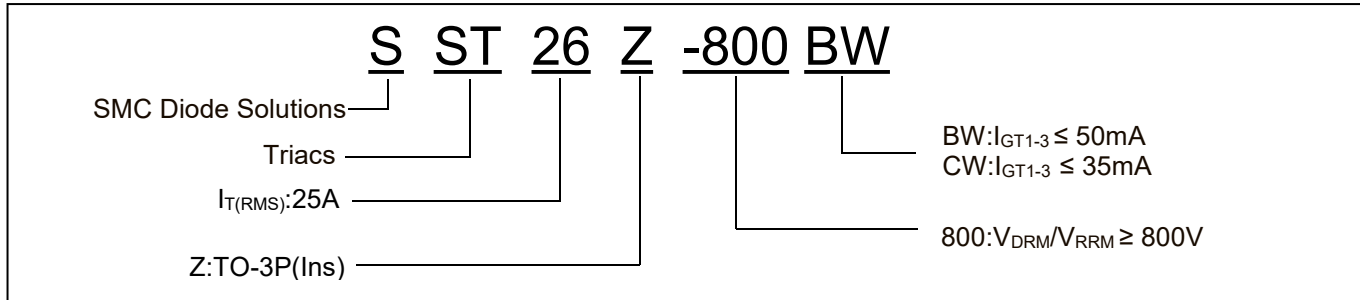
Static Characteristics

Symbol	Condition	Max.	Units
V_{TM}	$I_T=35\text{A } t_p=380\mu\text{s}, T_j=25^{\circ}\text{C}$	1.5	V
I_{DRM}	$V_D=V_{DRM} V_R=V_{RRM}, T_j=25^{\circ}\text{C}$	5	μA
I_{RRM}	$V_D=V_{DRM} V_R=V_{RRM}, T_j=125^{\circ}\text{C}$	3	mA

Thermal Resistances

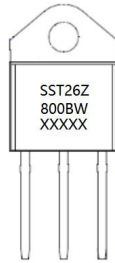
Symbol	Condition		Value	Units
$R_{th(j-c)}$	Junction to case(AC)	TO-3P(Ins)	1.0	$^{\circ}\text{C/W}$

Ordering Information



Device	Package	Shipping
SST26 Series	TO-3P	30pcs/ Tube

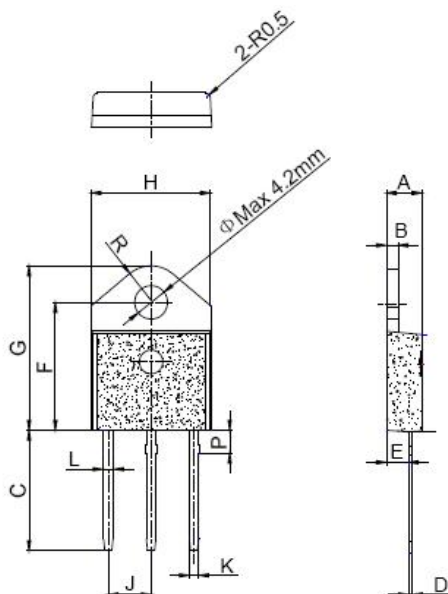
Marking Diagram



Where XXXXX is YYWWL

SST26Z-800BW = Part name
YY = Year
WW = Week
L = Lot Number

Mechanical Dimensions TO-3P



SYMBOL	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	

Ratings and Characteristics Curves

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

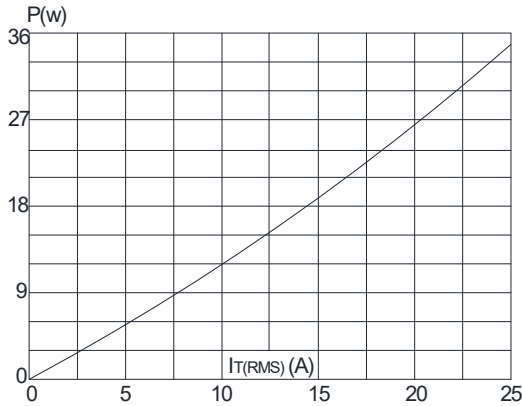


FIG.3: Surge peak on-state current versus number of cycles

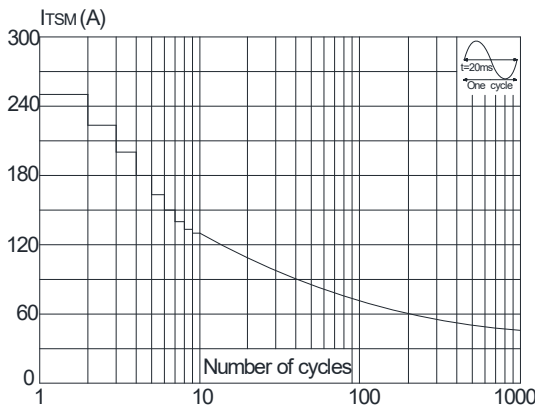


FIG.5: Non-repetitive surge peak on-state current for a sinusoidal pulse with width $t_p < 20\text{ms}$, and corresponding value of I^2t ($di/dt < 50\text{A}/\mu\text{s}$)

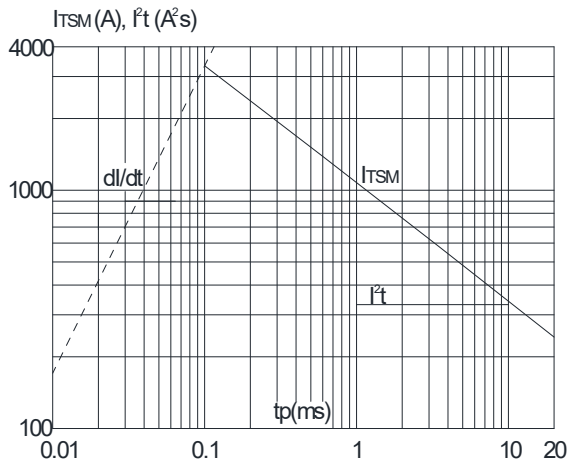


FIG.2: RMS on-state current versus case temperature

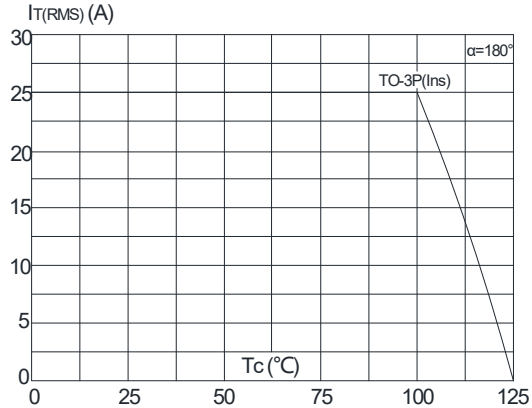


FIG.4: On-state characteristics (maximum values)

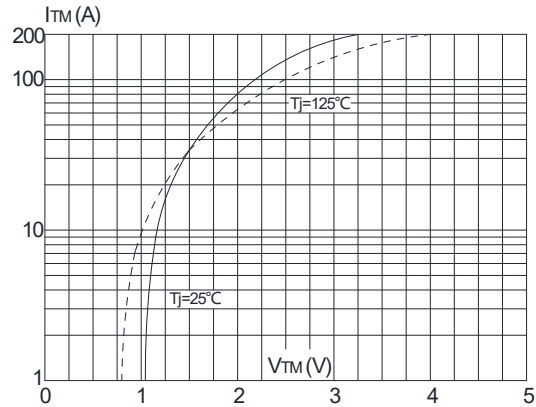
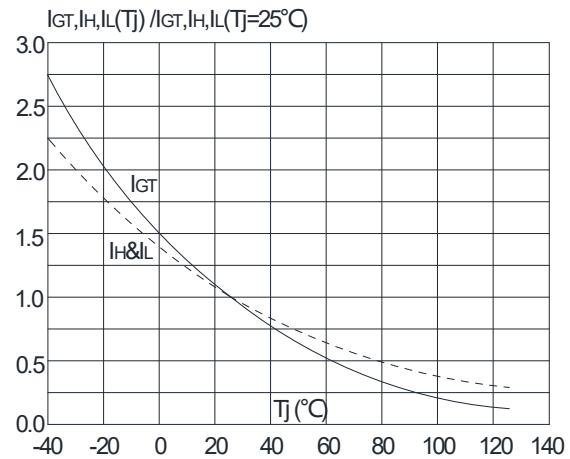


FIG.6: Relative variations of gate trigger current, holding current and latching current versus junction temperature



Technical Data
Data Sheet N2168, Rev.-



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