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

ELECTRICAL CHARACTERISTICS (Tj=25 unless otherwise specified)

Symbol	Test Condition	Quadrant	Value		Unit
I_{GT}	V_D =12V R_L =33	- -	MAX.	50	mA
V_{GT}		- -	MAX.	1.3	V
V_{GD}	V_D =V_{DRM} T_j=125 R_L =3.3k	- -	MIN.	0.2	V
I_L	I_G=1.2I_{GT}	-	MAX.	180	mA
				180	
I_H	I_T =1A		MAX.	100	mA
dV/dt	V_D=1070V Gate Open T_j=125		MIN.	1500	V s
(dI/dt)c	(dV/dt)c=20 9 ,T_j=125		MIN.	28	A/ms
t_{on}	I_G=80mA I_A=400mA I_R=40mA T_j=25		TYP.	15	s
t_{off}				90	

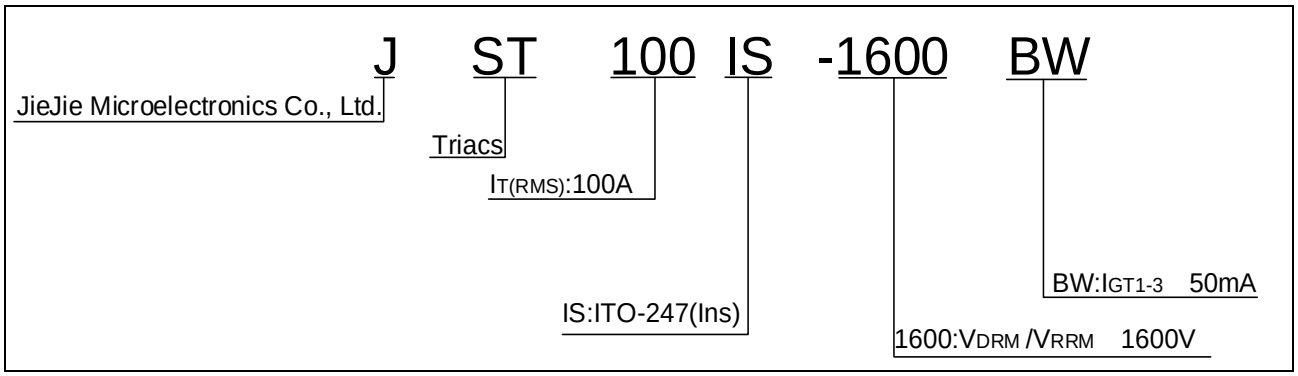
STATIC CHARACTERISTICS

Symbol	Parameter		Value(MAX .)	Unit
V_{TM}	I_{TM} =150A t_p=3100 s	T_j=25	1.8	V
V_{TO}	Threshold voltage	T_j=125	0.67	V
R_D	Dynamic resistance	T_j=125	7.5	m
I_{DRM}	V_D=$V_{DRM}$$V_R$ =V_{RRM}	T_j=25	20	A
I_{RRM}		T_j=125	15	mA

THERMAL RESISTANCES

Symbol	Parameter	Value	Unit
$R_{th(j-c)}$	junction to case (AC)	0.6	/W
$R_{th(j-a)}$	junction to ambient (AC)	45	/W

ORDERING INFORMATION



MARKING

RKING

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

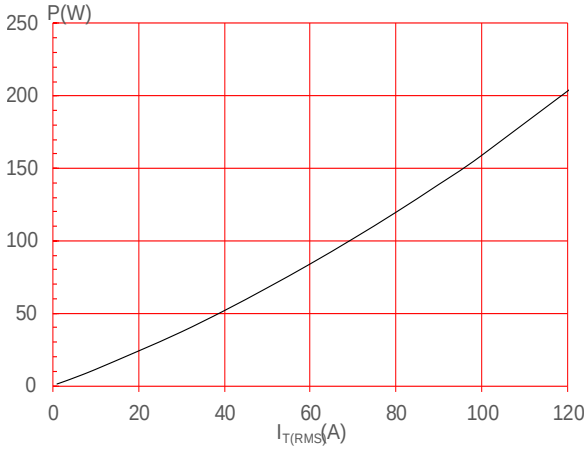


FIG.2: RMS on-state current versus case temperature

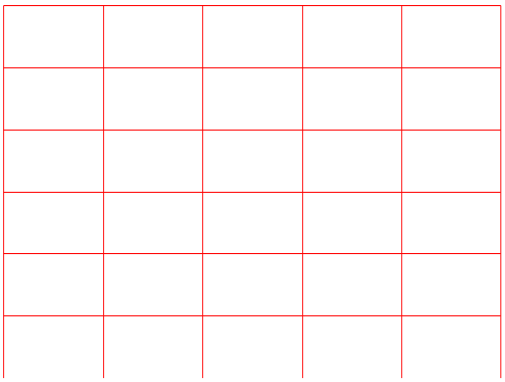


FIG.7 Test circuit for inductive and resistive loads to IEC-61000-4-5 standards

ORDERING INFORMATION

Order code	Voltage V_{DRM}/V_{RRM}(V)	IGT(mA)	Package	Base qty. (pcs)	Delivery mode
		H- I- J			
JST100IS-1600BW	1600	50	ITO-247(Ins)	25	Tube

Document Revision History

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

PACKAGE MECHANICAL DATA

