

Storage junction temperature range	T_{stg}	-40-150	
Operating junction temperature range	T_j	-40-125	

Peak gate current ($t_p=20\mu s$, $T_j=125$)	I_{GM}	4	A
Average gate power dissipation ($T_j=125$)	$P_{G(AV)}$	0.5	W
Peak gate power	P_{GM}	10	W
Peak pulse voltage ($T_j=25$; non-repetitive, off-state; FIG.7)	V_{pp}	1.5	kV

ELECTRICAL CHARACTERISTICS ($T_j=25$ unless otherwise specified)

Symbol	Test Condition	Quadrant	Value		Unit
I_{GT}	$V_D=12V$ $R_L=33\Omega$	- -	MAX.	10	mA
V_{GT}		- -	MAX.	1	V
V_{GD}	$V_D=V_{DRM}$ $T_j=125$ $R_L=3.3k\Omega$	- -	MIN.	0.2	V
I_L	$I_G=1.2I_{GT}$	-	MAX.	25	mA
				30	
I_H	$I_T=100mA$		MAX.	15	mA
dV/dt	$V_D=800V$ Gate Open $T_j=125$		MIN.	100	V/ μs
$(dI/dt)_c$	$(dV/dt)_c=10V/\mu s$, $T_j=125$		MIN.	3	A/ms
t_{on}	$I_G=20mA$ $I_A=200mA$ $I_R=20mA$ $T_j=25$		TYP.	2.5	μs
t_{off}				25	

STATIC CHARACTERISTICS

Symbol	Parameter		Value(MAX.)	Unit
V_{TM}	$I_{TM}=11A$ $t_p=380\mu s$	$T_j=25$	1.5	V
V_{TO}	Threshold voltage	$T_j=125$	0.82	V
R_D	Dynamic resistance	$T_j=125$	45	m Ω
I_{DRM}	$V_D=V_{DRM}$ $V_R=V_{RRM}$	$T_j=25$	10	μA
I_{RRM}		$T_j=125$	1	mA

THERMAL RESISTANCES

Symbol	Parameter	Value	Unit
$R_{th(j-c)}$	junction to case (AC)	2.8	/W
$R_{th(j-a)}$	junction to ambient (AC)	60	/W





FIG.1: Maximum on-state current versus case temperature



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



**ORDERING INFORMATION**

Order code	Voltage $V_{\text{DRM}}/V_{\text{RRM}}$ (V)	IGT(mA)	Package	Base qty. (pcs)	Delivery mode
		- -			
JST08F-1200SW	1200	10	TO-220F(Ins)	50	Tube

Document Revision History

Date	Revision	Changes
Apr.12, 2023	A.1.0	Last updated
Oct.13, 2025	A.1.1	Revise PACKAGE MECHANICAL DATA



PACKAGE MECHANICAL DATA



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