



Peak gate current ( $t_p=20\mu s$ , $T_j=150$ )	$I_{GM}$	10	A
Average gate power dissipation ( $T_j=150$ )	$P_{G(AV)}$	1	W
Peak gate power	$P_{GM}$	20	W
Peak pulse voltage ( $T_j=25$ ; non-repetitive, off-state; FIG.7)	$V_{pp}$	0.5	kV

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

Symbol	Test Condition	Value			Unit
		MIN.	TYP.	MAX.	
$I_{GT}$	$V_D=12V$ $R_L=33$	-	-	35	mA
$V_{GT}$		-	-	1	V
$V_{GD}$	$V_D=V_{DRM}$ $T_j=150$ $R_L=3.3k$	0.2	-	-	V
$I_L$	$I_G=1.2I_{GT}$	-	-	80	mA
$I_H$	$I_T=500mA$	-	-	70	mA
dV/dt	$V_D=540V$ Gate Open $T_j=125$	1 00	-	-	V/ $\mu s$
	$V_D=540V$ Gate Open $T_j=150$	500	-	-	
$t_{on}$	$I_G=40mA$ $I_A=400mA$ $I_R=40mA$ $T_j=25$	-	2	-	$\mu s$
$t_{off}$		-	60	-	

**STATIC CHARACTERISTICS**

Symbol	Parameter		Value(MAX.)	Unit
$V_{TM}$	$I_{TM}=80A$ $t_p=380\mu s$	$T_j=25$	1.55	V
$V_{TO}$	Threshold voltage	$T_j=150$	0.65	V
$R_D$	Dynamic resistance	$T_j=150$	17	m

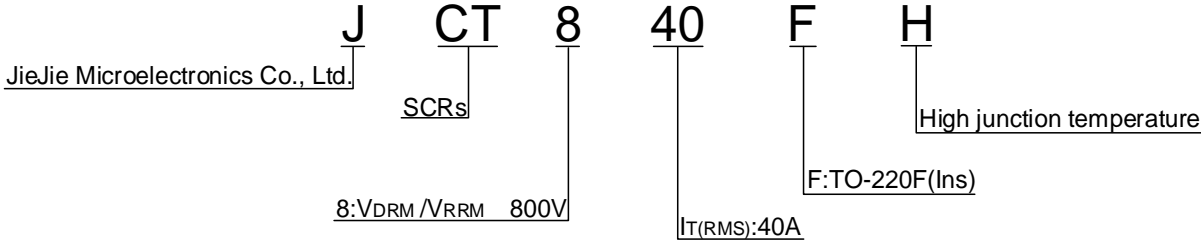
$I_{DRM}$  e'

D

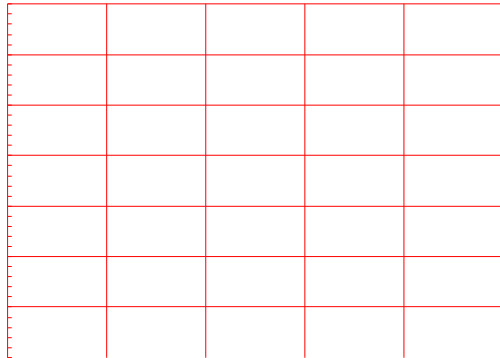
R ee

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ORDERING INFORMATION

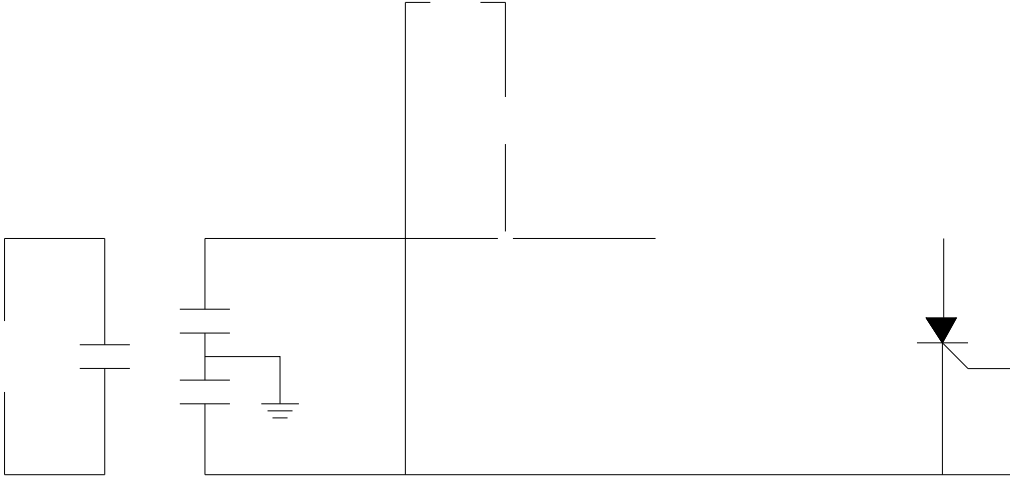


**FIG.1:** Maximum power dissipation versus RMS on-state current



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

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



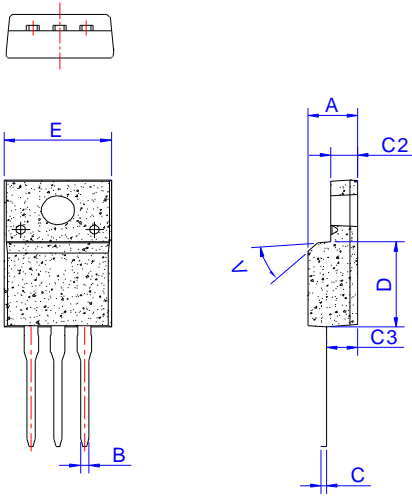
**ORDERING INFORMATION**

<b>Order code</b>	<b>Voltage <math>V_{DRM}/V_{RRM}</math> (V)</b>	<b>IGT(mA)</b>	<b>Package</b>	<b>Base qty. (pcs)</b>	<b>Delivery mode</b>
<b>JCT840FH</b>	<b>800</b>	<b>35</b>	<b>TO-220F(Ins)</b>	<b>50</b>	<b>Tube</b>

**Document Revision History**

<b>Date</b>	<b>Revision</b>	<b>Changes</b>
Jun.15, 2023	A.1.0	Last update
Oct.16, 2025	A.1.1	Revise PACKAGE MECHANICAL DATA

PACKAGE MECHANICAL DATA



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