

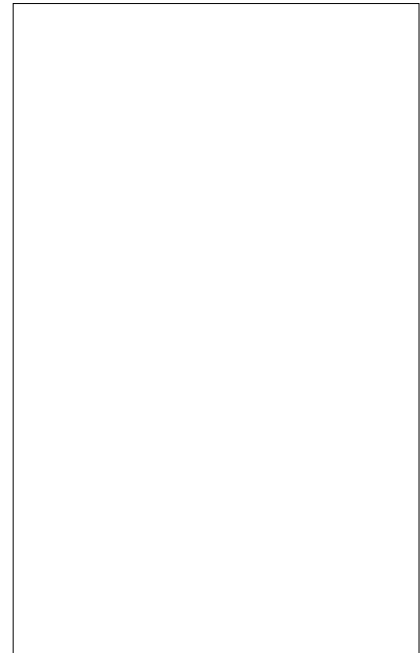


JCT825CH 25A SCR

Rev.A.1.1

DESCRIPTION:

With high ability to withstand the shock loading of large current, JCT825CH SCR provides high dV/dt rate with strong resistance to electromagnetic interference. It is especially



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}	$V_D=12V$ $R_L=33\Omega$	-	-	20	mA
V_{GT}		-	-	1	V
V_{GD}	$V_D=V_{DRM}$ $T_j=150$ $R_L=3.3k\Omega$	0.2	-	-	V
I_L	$I_G=1.2I_{GT}$	-	-	70	mA
I_H	$I_T=500mA$	-	-	60	mA
dV/dt	$V_D=540V$ Gate Open $T_j=125$	00	-	-	V/ μs
	$V_D=540V$ Gate Open $T_j=150$	500	-	-	
t_{on}	$I_G=20mA$ $I_A=200mA$ $I_R=20mA$ $T_j=25$	-	2	-	μs
t_{off}		-	50	-	

STATIC CHARACTERISTICS

Symbol	Parameter		Value(MAX.)	Unit
V_{TM}	$I_{TM}=50A$ $t_p=380\mu s$	$T_j=25$	1.5	V
V_{TO}	Threshold voltage	$T_j=150$	0.7	V
R_D	Dynamic resistance	$T_j=150$	18	m Ω
I_{DRM}	$V_D=V_{DRM}$ $V_R=V_{RRM}$	$T_j=25$	5	μA
I_{RRM}		$T_j=150$	8	mA

THERMAL RESISTANCES

Symbol	Parameter	Value	Unit
$R_{th(j-c)}$	junction to case (DC)	0.3	/W
$R_{th(j-a)}$	junction to ambient (DC)	60	/W

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

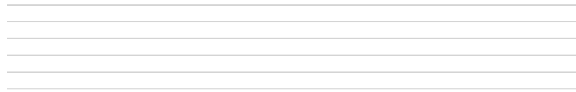


FIG.2: RMS on-state current versus case
temperature

ORDERING INFORMATION

Order code	Voltage $V_{\text{DRM}}/V_{\text{RRM}}$ (V)	IGT(mA)	Package	Base qty. (pcs)	Delivery mode
JCT825CH	800	20	TO-220C	50	Tube

Document Revision History

Date	Revision	Changes
Jun.15, 2023	A.	

PACKAGE MECHANICAL DATA



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