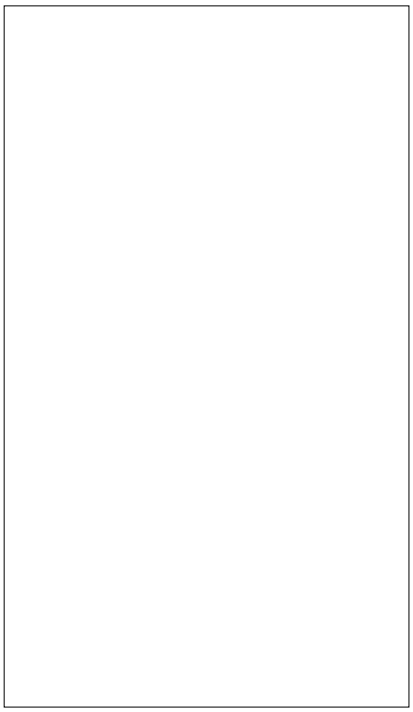
JCT655T 55A SCR

Rev.A.1.0

With high ability to withstand the shock loading of large current, JCT655T SCR provides high dV/dt rate with strong resistance to electromagnetic interference.It is especially recommended for use on solid state relay, motorcycle, power charger, T-tools etc. Complying with UL standards (File ref: E252906).Package TG-C is RoHS compliant.



Average gate power dissipation (T_j=125)	$P_{G(AV)}$	1	W
Peak gate power	P_{GM}	20	W
Peak pulse voltage (T_j=25 ; non-repetitive,off-state;FIG.7)	V_{pp}	0.7	kV

(T_j=25 unless otherwise specified)

Symbol	Test Condition	Value			Unit
		MIN.	TYP.	MAX.	
I_{GT}	V_D=12V R_L=33Ω	10	-	50	mA
V_{GT}		-	-	1	V
V_{GD}	V_D=V_{DRM} T_j=125 R_L=3.3kΩ	0.2	-	-	V
I_L	I_G=1.2I_{GT}	-	-	120	mA
I_H	I_T=500mA	-	-	100	mA
dV/dt	V_D=400V Gate Open T_j=125	2000	-	-	V/μs
t_{on}	I_G=50mA I_A=500mA I_R=50mA T_j=25	-	4	-	μs
t_{off}		-	130	-	

Symbol	Parameter		Value(MAX.)	Unit
V_{TM}	I_{TM}=80A t_p=380μs	T_j=25	1.5	V
V_{TO}	Threshold voltage	T_j=125	0.76	V
R_D	Dynamic resistance	T_j=125	8.5	mΩ
I_{DRM}	V_D=V_{DRM} V_R=V_{RRM}	T_j=25	8	μA
I_{RRM}		T_j=125	4	mA

Symbol	Parameter	Value	Unit
$R_{th(j-c)}$	junction to case(DC)	0.7	/W
$R_{th(j-a)}$	junction to ambient (DC)	45	/W

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

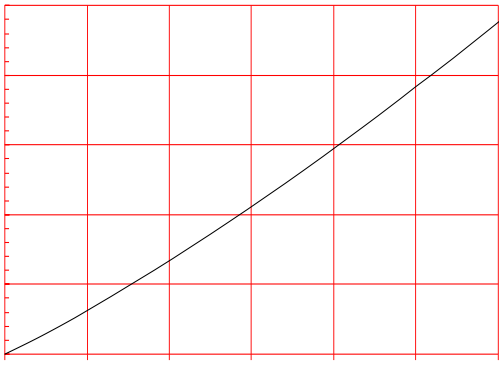


FIG.2: RMS on-state current versus case temperature

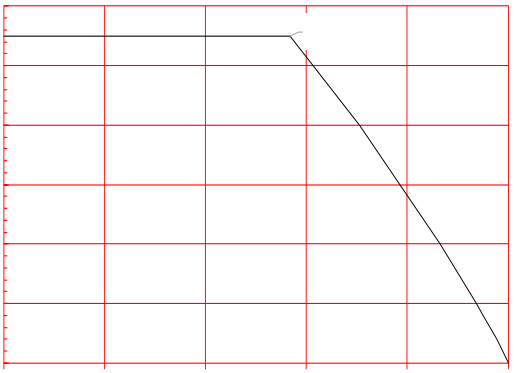


FIG.3: Surge peak on-state current versus number of cycles

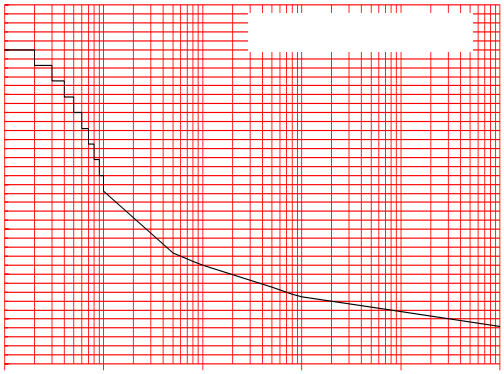


FIG.4: On-state characteristics

JCT655T

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