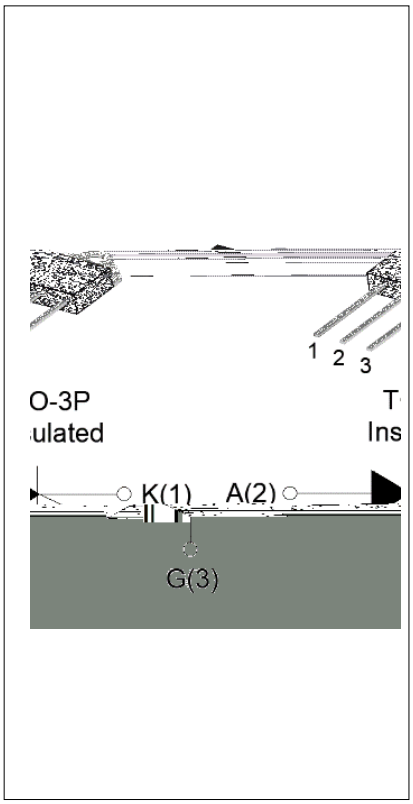
JCT1055Z 55A SCR

Rev.A.1.1

DESCRIPTION:

With high ability to withstand the shock loading of large current, JCT1055Z 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. From all three terminals to external heatsink,JCT1055Z provides a rated insulation voltage of 2500 V_{RMS}, complying with UL standards (File ref: E252906).Package TO-3P is RoHS compliant.



MAIN FEATURES

Symbol	Value	Unit
$I_{T(RMS)}$	55	A
V_{DRM}/V_{RRM}	1000	V
I_{GT}	≤50	mA

ABSOLUTE MAXIMUM RATINGS

Parameter	Symbol	Value	Unit
Storage junction temperature range	T_{stg}	-40-150	
Operating junction temperature range	T_j	-40-125	
Repetitive peak off-state voltage (T_j=25)	V_{DRM}	1000	V
Repetitive peak reverse voltage (T_j=25)	V_{RRM}	1000	V
Average on-state current (T_C 60)	$I_{T(AV)}$	35	A
RMS on-state current (T_C 60)	$I_{T(RMS)}$	55	A
Non repetitive surge peak on-state current (t_p=10ms, T_j=25)	I_{TSM}	700	A
Non repetitive surge peak on-state current (t_p=8.3ms, T_j=25)		750	
I^2t value for fusing (t_p=10ms , T_j=25)	I^2t	2450	A^2s
Critical rate of rise of on-state current (I_G=2 I_{GT}, f=100Hz , T_j=125)	dI/dt	200	A/μs

Peak gate current (t_p=20μs , T_j=125)	I_{GM}	10	A
Average gate power dissipation (T_j=125)	$P_{G(AV)}$	1	W
Peak gate power	P_{GM}	20	W

ORDERING INFORMATION

J CT 10 55 Z

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

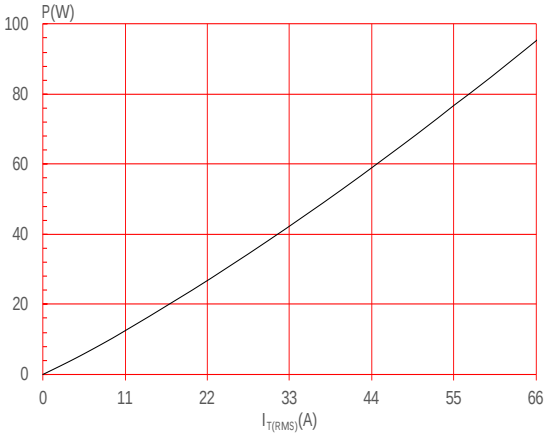
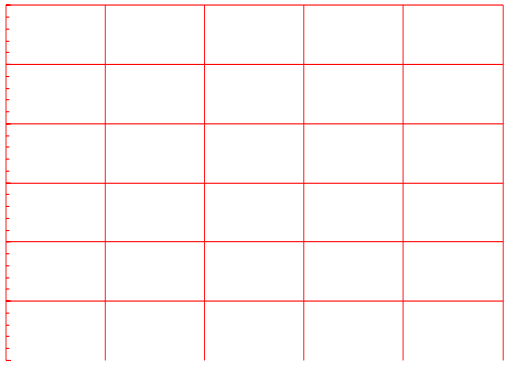


FIG.2: RMS on-state current versus case temperature



JCT1055Z

ORDERING INFO

Order code		IGT(mA)	PackC 0.775.6.48 539.0 10.56 70.46 8.4 r11.48 563.32 7