JCT1275Z 75A SCR

Rev.A.1.1

With high ability to withstand the shock loading of large current, JCT1275Z SCR provides high dV/dt rate with strong resistance to electromagnetic interference. It is especially recommended for use on solid state relay, UPS, SVC, power charger, T-tools etc. JCT1275Z provide a rated insulation voltage of 2500 V_{RMS}, complyingwith UL standards (File ref: E252906).Package TO-3P is RoHS compliant.

Symbol	Value	Unit
$I_{T(RMS)}$	75	A
V_{DRM} /V_{RRM}	1200	V
I_{GT}	10-80	mA

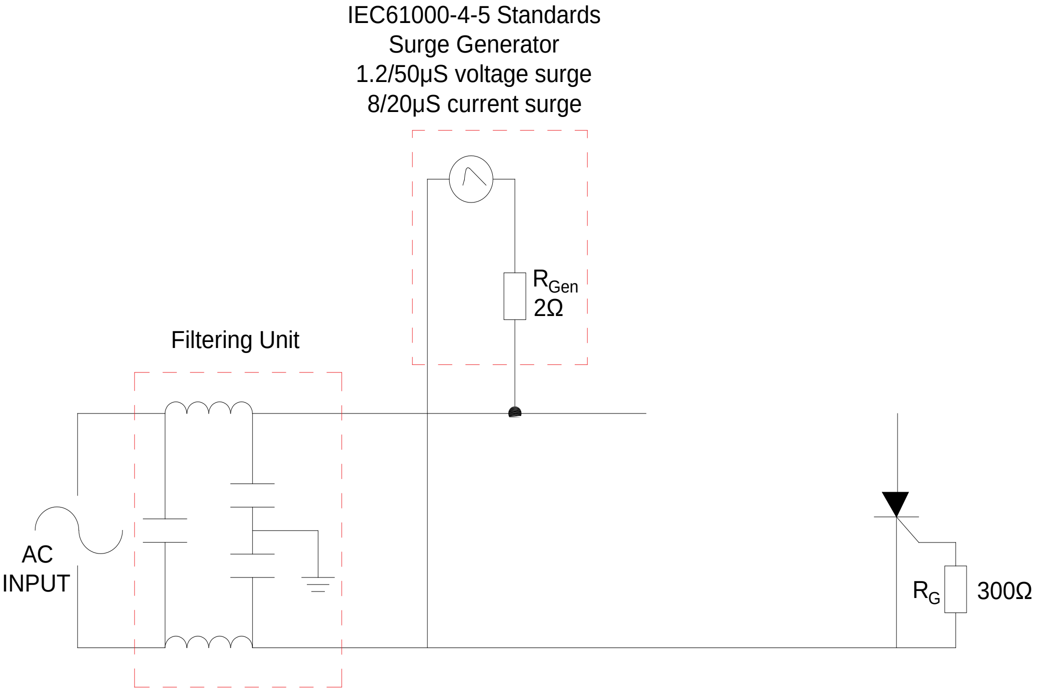
Parameter	**Symbol**	**Value**	**Unit**
Storage junction temperature range	T_{stg}		
Operating junction temperature range	T_j	-40-125	
Repetitive peak off-state voltage (T_j=25)	V_{DRM}		
Repetitive peak reverse voltage (T_j=25)	V_{RRM}		
Average on-state current (T_C 71)	$I_{T(AV)}$	49	A
RMS on-state current (T_C 71)	$I_{T(RMS)}$		
Non repetitive surge peak on-state current (t_p=10ms , T_j=25)	I_{TSM}	800	A

Average gate power dissipation (T_j=125)	$P_{G(AV)}$	1	W
Peak gate power	P_{GM}	22	W
Peak pulse voltage (T_j=25 ; non-repetitive,off-state;FIG.7)	V_{pp}	1	kV

(T_j=25 unless otherwise specified)

Symbol	**Test Condition**	**Value**			**Unit**
		MIN.	**TYP.**	**MAX.**	
I_{GT}	V_D=12V R_L=33Ω	10	-	80	mA
V_{GT}		-	-	1.3	V
V_{GD}	V_D=V_{DRM} T_j=125 R_L=3.3kΩ	0.2	-	-	V
I_L	I_G=1.2I_{GT}	-	-	200	mA
I_H	I_T=500mA	-	-	150	mA
dV/dt	V_D=800V Gate Open T_j=125	2000	-	-	V/μs 20

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



Order code	Voltage V_{DRM}/V_{RRM} (V)	IGT(mA)	Package	Base qty. (pcs)	Delivery mode
JCT1275Z	**1200**	**10-80**	**TO-3P**	**30**	**Tube**

Document Revision History

Date	Revision	Changes
Apr.13, 2023	A.1.0	Last update
Oct.16, 2025	A.1.1	Revise PACKAGE MECHANICAL DATA