



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} , complying with 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 ($T_j=25^\circ C$)	V_{DRM}		
Repetitive peak reverse voltage ($T_j=25^\circ C$)	V_{RRM}		
Average on-state current ($T_C \leq 71^\circ C$)	$I_{T(AV)}$	49	A
RMS on-state current ($T_C \leq 71^\circ C$)	$I_{T(RMS)}$		

Non repetitive surge peak on-state current
($t_p=10ms$, $T_j=25^\circ C$)

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

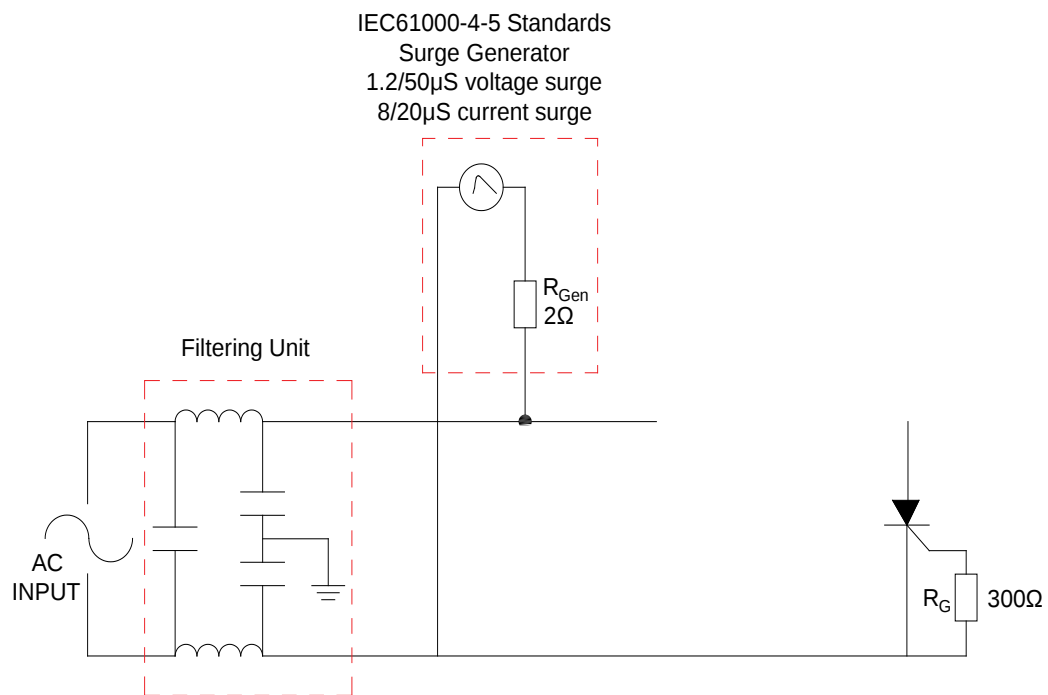
($T_j=25$ unless otherwise specified)

Symbol	Test Condition	Value			Unit
		MIN.	TYP.	MAX.	
I_{GT}	$V_D=12V$ $R_L=33\Omega$	10	-	80	mA
V_{GT}		-	-	1.3	V
V_{GD}	$V_D=V_{DRM}$ $T_j=125$ $R_L=3.3k\Omega$	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

JCT1275Z

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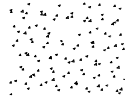
FIG.7 Test circuit for inductive and resistive loads to IEC-61000-4-5 standards.



Order code	Voltage $V_{\text{DRM}}/V_{\text{RRM}}$ (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



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