



## 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<sub>RMS</sub>, complying with UL standards (File ref: E252906). Package TO-3P is RoHS compliant.

Symbol	Value	Unit
I <sub>T(RMS)</sub>	75	A
V <sub>DRM</sub> /V <sub>RRM</sub>	1200	V
I <sub>GT</sub>	10-80	mA

Parameter	Symbol	Value	Unit
Storage junction temperature range	T <sub>stg</sub>		
Operating junction temperature range	T <sub>j</sub>	-40-125	
Repetitive peak off-state voltage (T <sub>j</sub> =25 °C)	V <sub>DRM</sub>		
Repetitive peak reverse voltage (T <sub>j</sub> =25 °C)	V <sub>RRM</sub>		
Average on-state current (T <sub>c</sub> 71 °C)	I <sub>T(AV)</sub>	49	A
RMS on-state current (T <sub>c</sub> 71 °C)	I <sub>T(RMS)</sub>		
Non repetitive surge peak on-state current (t <sub>p</sub> =10ms , T <sub>j</sub> =25 °C)	I <sub>TSM</sub>	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)

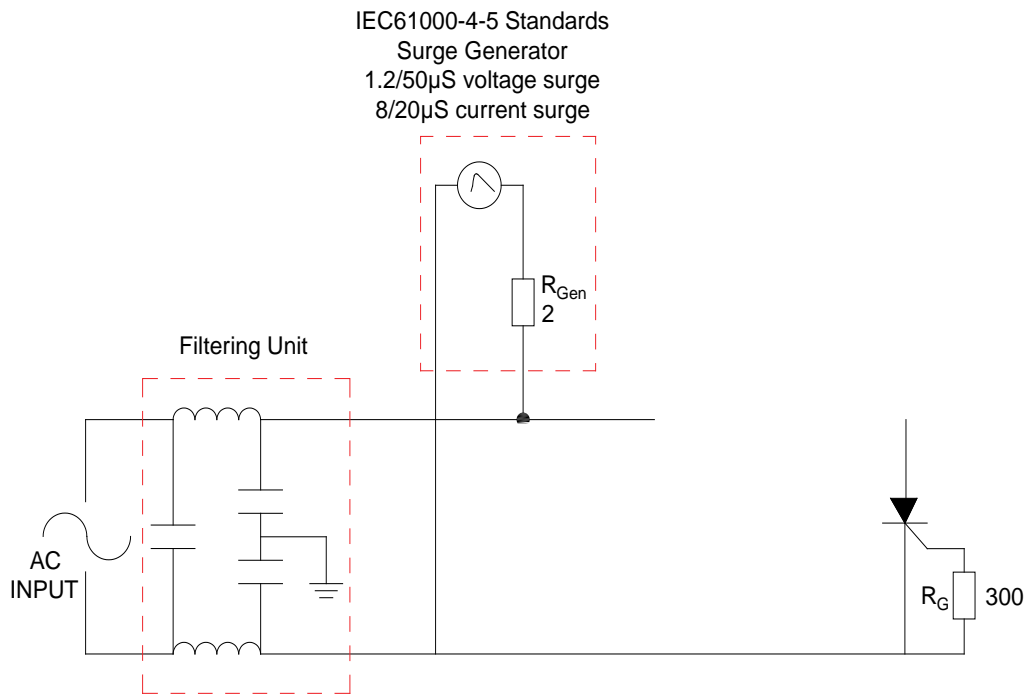
Symbol	Test Condition	Value			Unit
		MIN.	TYP.	MAX.	
$I_{GT}$	$V_D=12V R_L=33$	10	-	80	mA
$V_{GT}$		-	-	1.3	V
$V_{GD}$	$V_D=V_{DRM} T_j=125 R_L=3.3k$	0.2	-	-	V
$I_L$	$I_G=1.2I_{GT}$	-	-	200	mA
$I_H$	$I_T=500mA$	-	-	150	mA
dV/dt	$V_D=800V$ Gate Open $T_j=125$	2000	-	-	V/ $\mu s$ 20



**JCT1275Z**

**JieJie Microelectronics**

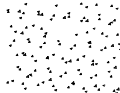
FIG.7 Test circuit for inductive and resistive loads to IEC-61000-4-5 standards.



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



Information furnished in this document is preliminary and is subject to change without notice. It is not intended to be used for any other purpose than the one for which it is intended.

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