JX075E 12A Sensitive SCR

Rev.A.1.1

The JX075E SCR provides high dV/dt rate with strong resistance to electromagnetic interface. It is especially recommended for use on residual current circuit breaker, straight hair, igniter etc. Package TO-263 is RoHS compliant.

Symbol	Value	Unit
$I_{T(RMS)}$	12	A
V_{DRM} /V_{RRM}	800	V
I_{GT}	≤200	μA

Parametery254 (m)23 (bol)]TJ 0 Tc 0 Tw 3611 0 Td ( )Tj EMC /P <</MCID

Peak gate power	P_{GM}	10	W
Peak pulse voltage (T_j=25 ; non-repetitive,off-state;FIG.8)	V_{pp}	0.5	kV

unless otherwise specified

Symbol	Test Condition	Value			Unit
		MIN.	TYP.	MAX.	
I_{GT}	V_D=12V R_L=33Ω	-	60	200	μA
V_{GT}		-	-	0.8	V
V_{GD}	V_D=V_{DRM} T_j=110	0.2	-	-	V
I_L	I_G=1.2 I_{GT}	-	-	6	mA
I_H	I_T=0.05A	-	-	5	mA
dV/dt	V_D=540V T_j=25 R_{GK}=1kΩ	50	-	-	V/μs
	V_D=540V T_j=25 R_{GK}=220Ω	200	-	-	
t_{on}	I_G=10mA I_A=20mA I_R=2mA T_j=25	-	2	-	μs
t_{off}		-	70	-	μs

Symbol	Parameter		Value(MAX.)	Unit
V_{TM}	I_T=24A t_p=380μs	T_j=25	1.6	V
V_{TO}	Threshold voltage	T_j=110	0.9	V
R_D	Dynamic Resistance	T_j=110	0.02	Ω
I_{DRM}	V_D=V_{DRM} V_R=V_{RRM}	T_j=25	5	μA
I_{RRM}		T_j=110	0.5	mA

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

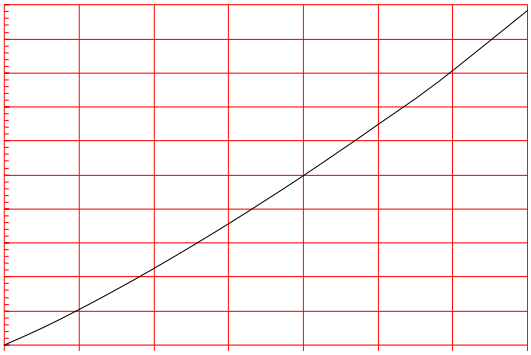


FIG.2: RMS on-state current versus case temperature

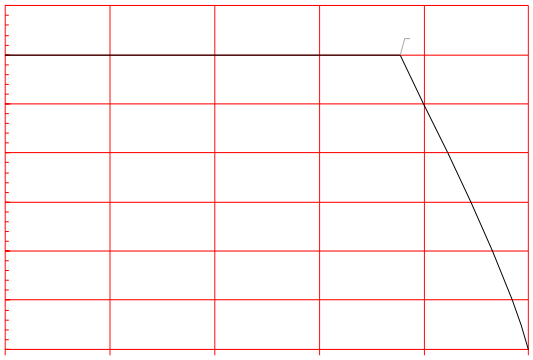


FIG.7: Relative variations of gate trigger current, holding current and latching current versus junction temperature

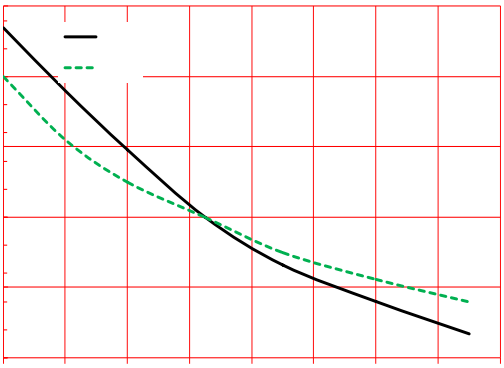
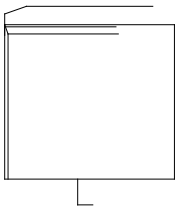


FIG.8

Order code	Voltage V_{DRM}/V_{RRM} (V)	IGT(μA)	Package	Base qty. (pcs)	Delivery mode
JX075E	800	≤200	TO-263	50	Tube
JX075E-TR				800	Tape & Reel

Document Revision History

Date	Revision	Changes
Apr.12, 2023	A.1.0	Last update
Oct.17, 2025	A.1.1	Revise PACKAGE MECHANICAL DATA



Ref.	Dimensions					
	Millimeters			Inches		
	Min.	Typ.	Max.	Min.	Typ.	Max.
A	9.90		10.20	0.390		0.402
B	14.70		15.80	0.579		0.622
C	9.40		9.60	0.370		0.378
D	2.40			0.094		
E	1.20		1.50	0.047		0.059
F	0.75		0.85	0.029		0.033