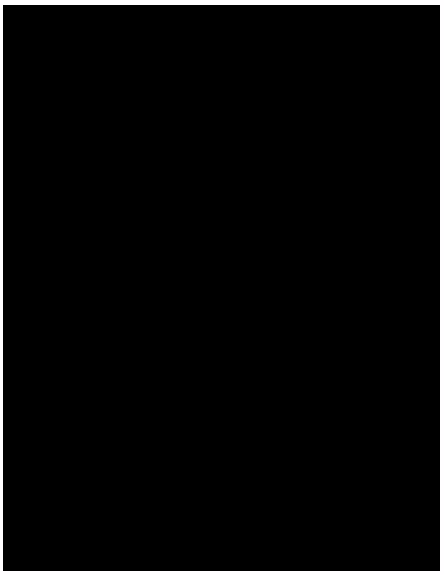
## JX075F 12A Sensitive SCR

Rev.A.1.1

### DESCRIPTION:

The JX075F 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. From all three terminals to external heatsink, JX075F provides a rated insulation voltage of 2000 $V_{RMS.}$ complying with UL standards (File ref: E252906). Package TO-220F is RoHS compliant.



### MAIN FEATURES

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

### ABSOLUTE MAXIMUM RATINGS

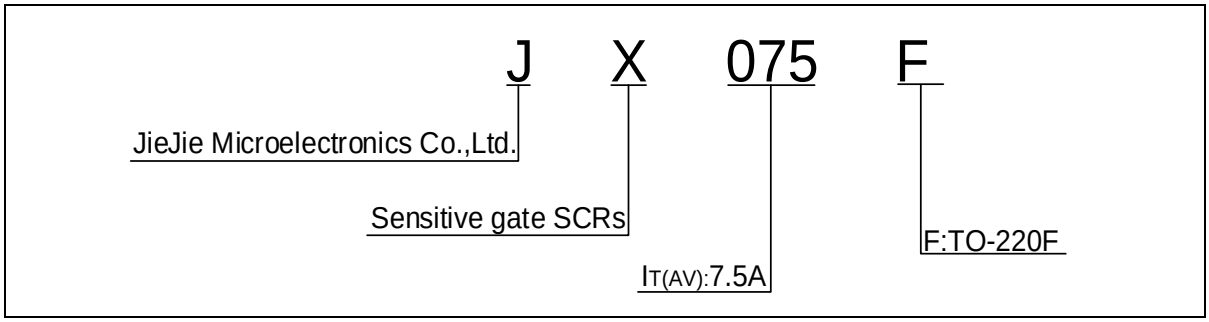
| Parameter | Symbol | Value | Unit |
|---|---|---|---|
| Storage junction temperature range | $T_{stg}$ | -40-150 | |
| Operating junction temperature range | $T_j$ | -40-110 | |
| Repetitive peak off-state voltage ($T_j$=25 ) | $V_{DRM}$ | 800 | V |
| Repetitive peak reverse voltage ($T_j$=25 ) | $V_{RRM}$ | 800 | V |
| Average on-state current ($T_C$ ≤ 65 ) | $I_{T(AV)}$ | 7.5 | A |
| RMS on-state current ($T_C$ ≤ 65 ) | $I_{T(RMS)}$ | 12 | A |
| Non repetitive surge peak on-state current ($t_p$=10ms , $T_j$=25 ) | $I_{TSM}$ | 120 | A |
| Non repetitive surge peak on-state current ($t_p$=8.3ms , $T_j$=25 ) | | 130 | |
| $I^2t$ value for fusing ($t_p$=10ms , $T_j$=25 ) | $I^2t$ | 72 | $A^2s$ |
| Critical rate of rise of on-state current ($I_G$=2 × $I_{GT}$ , f=100Hz , $T_j$=110 ) | dI/dt | 100 | A/μs |
| Peak gate current ($t_p$=20μs, $T_j$=110 ) | $I_{GM}$ | 4 | A |

| | | | |
|---|---|---|---|
| Average gate power dissipation ($T_j$=110 ) | $P_{G(AV)}$ | 1 | W |
| Peak gate power | $P_{GM}$ | 10 | W |
| Peak pulse voltage ($T_j$=25 ; non-repetitive,off-state;FIG.7) | $V_{pp}$ | 0.5 | kV |

**ELECTRICAL CHARACTERISTICS** ($T_j$=25 unless otherwise specified)

| Symbol | Test Condition | Value | | | Unit |
|---|---|---|---|---|---|
| | | MIN. | TYP. | MAX. | |

## ORDERING INFORMATION




## MARKING

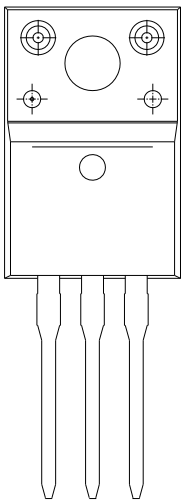


**FIG.1:** Maximum power dissipation versus RMS on-state current

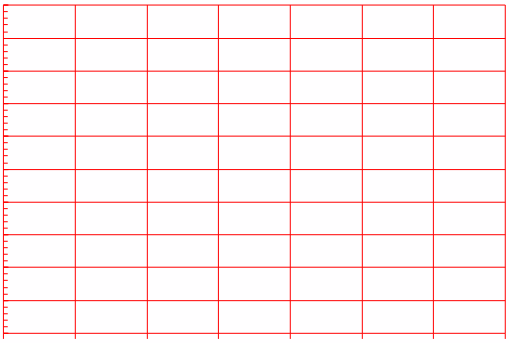


**FIG.2:** RMS on-state current versus case temperature

## ORDERING INFORMATION

| Order code | Voltage $V_{DRM}/V_{RRM}$ (V) | IGT(μA) | Package | Base qt |
|---|---|---|---|---|

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