



**JCT1285SJ**

**85A SCR**

Rev.A.1.0

## DESCRIPTION:

With high ability to withstand the shock loading of large current, JCT1285SJ 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. Package TO-247J is RoHS compliant.

## MAIN FEATURES

| Symbol            | Value | Unit |
|-------------------|-------|------|
| $I_{T(RMS)}$      | 85    | A    |
| $V_{DRM}/V_{RRM}$ | 1200  | V    |
| $I_{GT}$          | 10-80 | mA   |

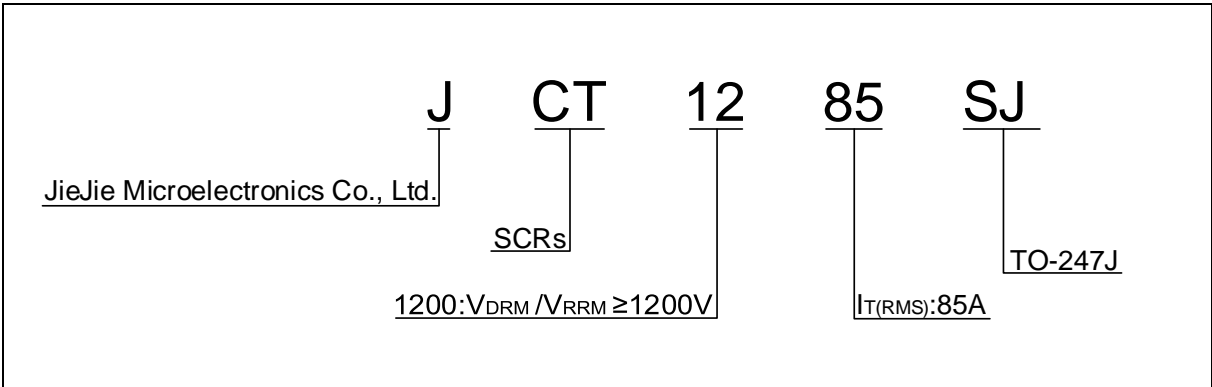
## ABSOLUTE MAXIMUM RATINGS

| Parameter  | Symbol    | Value   | Unit |
|--|-----------|---------|------|
| Storage junction temperature range                     | $T_{stg}$ | -40-150 |      |
| Operating junction temperature range                   | $T_j$     | -40-125 |      |
| Repetitive peak off-state voltage ( $T_j=25^\circ C$ ) | $V_{DRM}$ | 1200    | V    |

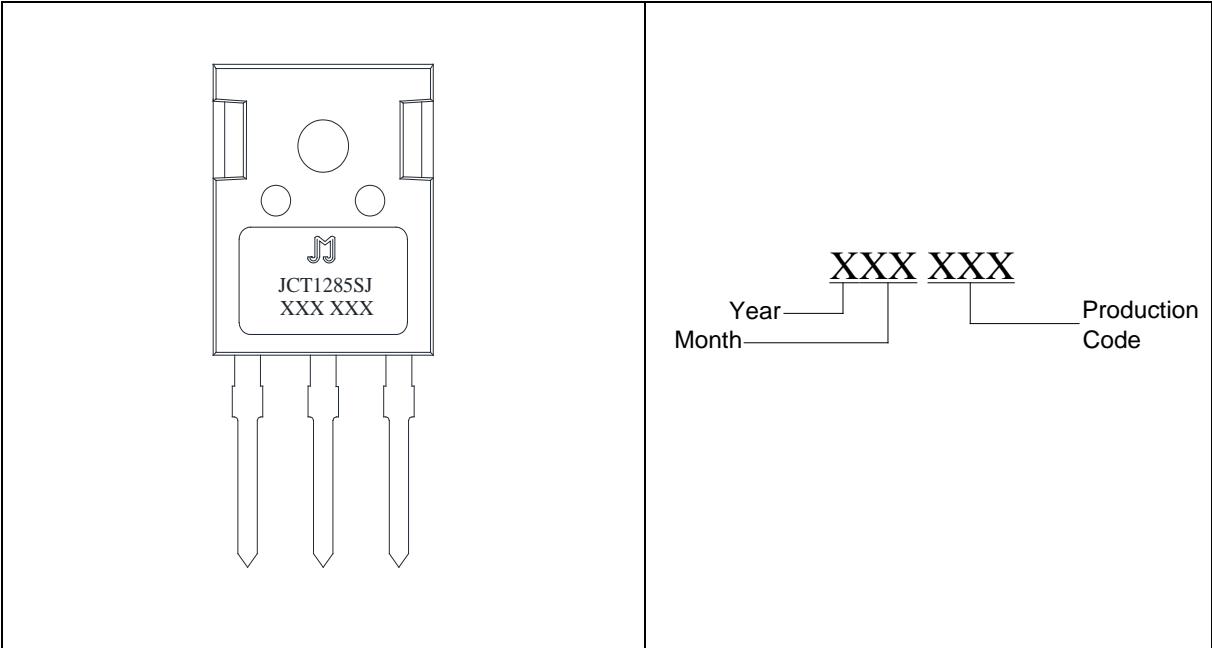
Repetitive peak reverse voltage ( $T_j=25^\circ C$ )  $V_{RRM}(tTc 0 Tw 2.22 00.004 Tc -0.002 Tw 0.33 00$



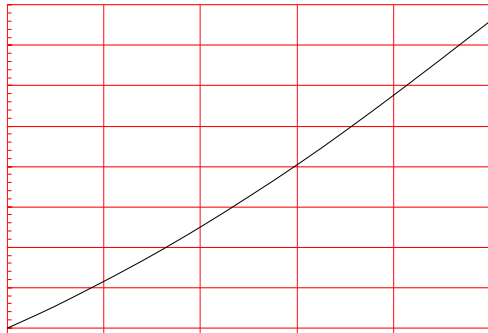
ORDERING INFORMATION



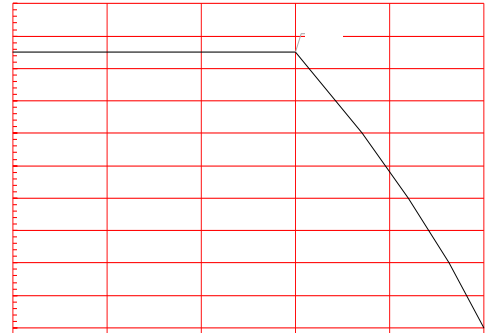
MARKING



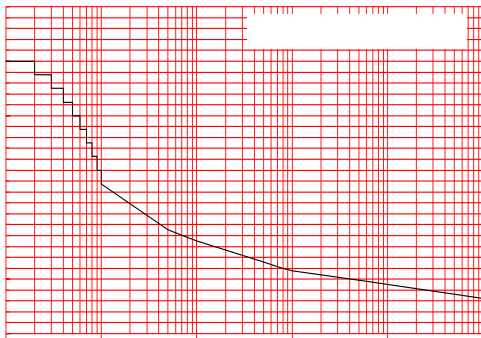
**FIG.1** Maximum power dissipation versus RMS on-state current



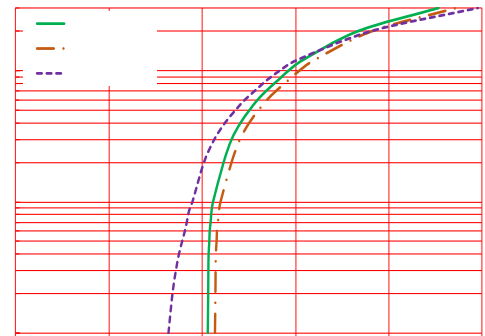
**FIG.2:** RMS on-state current versus case temperature



**FIG.3:** Surge peak on-state current versus number of cycles

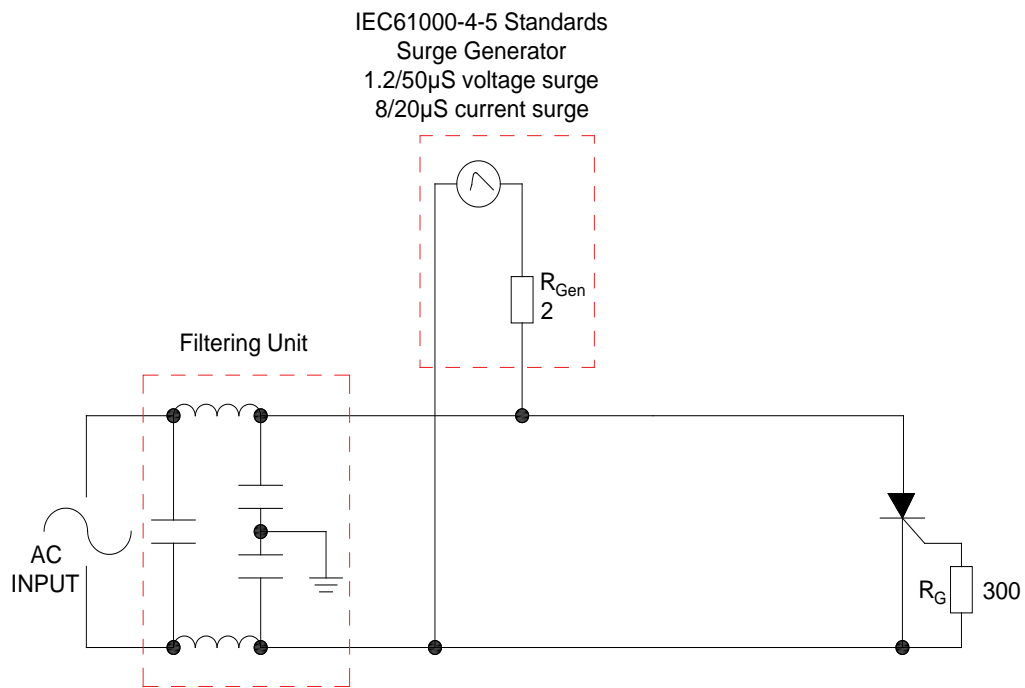


**FIG.4:** On-state characteristic



**FIG.5:** Non-repetitive surge peak on-state current for a sinusoidal pulse with width  $t_p < 20\text{ms}$ , and corresponding value of  $I^2t$  ( $di/dt < 200\text{A}/\mu\text{s}$ )

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



## LEAD FORMING AND SOLDERING

Refer to the application note “Assembly Instructions for Power Discretes in Through-hole Packages” released by JieJie

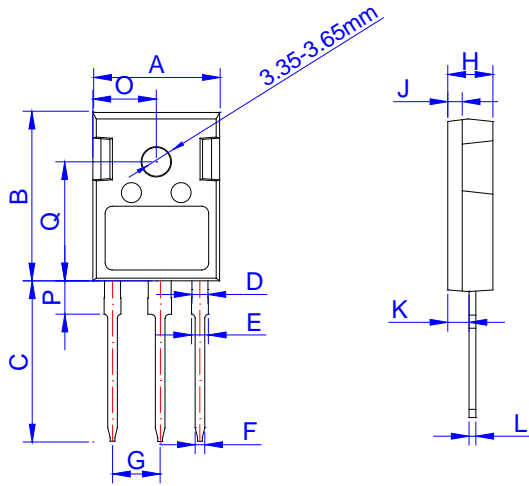
**ORDERING INFORMATION**

| <b>Order code</b> | <b>Voltage<br/><math>V_{DRM}/V_{RRM}</math> (V)</b> | <b>IGT(mA)</b> | <b>Package</b> | <b>Base qty.<br/>(pcs)</b> | <b>Delivery<br/>mode</b> |
|-------------------|---|----------------|----------------|----------------------------|--------------------------|
| <b>JCT1285SJ</b>  | <b>1200</b>   | <b>10-80</b>   | <b>TO-247J</b> | <b>30</b>                  | <b>Tube</b>              |

**Document Revision History**

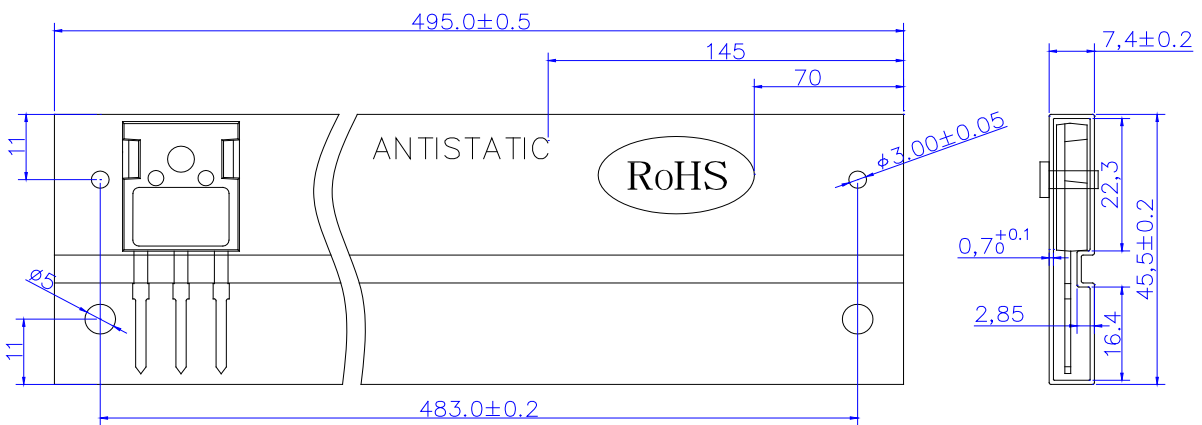
| <b>Date</b>  | <b>Revision</b> | <b>Changes</b> |
|--------------|-----------------|----------------|
| Apr.13, 2023 | A.1.0           | Last update    |

PACKAGE MECHANICAL DATA



| Ref. | Dimensions  |       |       |        |       |       |
|------|-------------|-------|-------|--------|-------|-------|
|      | Millimeters |       |       | Inches |       |       |
|      | Min.        | Typ.  | Max.  | Min.   | Typ.  | Max.  |
| A    | 15.50       | 15.80 | 16.10 | 0.610  | 0.622 | 0.634 |
| B    | 20.80       | 21.00 | 21.20 | 0.819  | 0.827 | 0.835 |
| C    | 19.70       | 20.00 | 20.30 | 0.776  | 0.787 | 0.799 |
| D    | 1.80        | 2.00  | 2.20  | 0.071  | 0.079 | 0.087 |
| E    | 1.90        | 2.10  | 2.30  | 0.075  | 0.083 | 0.091 |
| F    | 1.00        | 1.20  | 1.40  | 0.039  | 0.047 | 0.055 |
| G    |             | 5.44  |       |        | 0.214 |       |
| H    | 4.80        | 5.00  | 5.20  | 0.189  | 0.197 | 0.205 |
| J    | 1.90        | 2.00  | 2.10  | 0.075  | 0.079 | 0.083 |
| K    | 2.20        | 2.35  | 2.50  | 0.087  | 0.093 | 0.098 |
| L    | 0.41        | 0.60  | 0.79  | 0.016  | 0.024 | 0.031 |
| O    |             | 7.90  |       |        | 0.312 |       |
| P    | 4.05        | 4.15  | 4.25  | 0.016  | 0.024 | 0.031 |
| Q    |             | 14.85 |       |        | 0.587 |       |

DELIVERY MODE



| PACKAGE | OUTLINE | TUBE (PCS) | INNER BOX (PCS) | PER CARTON |
|---------|---------|------------|-----------------|------------|
| TO-247J | TUBE    | 30         | 450             | 2,250      |

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