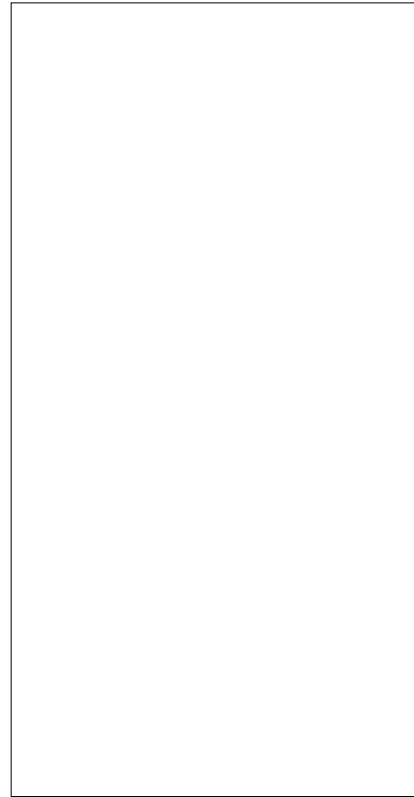


JCT655Z 55A SCR

Rev.A.1.1

DESCRIPTION:

With high ability to withstand the shock loading of large current, JCT655Z SCR provides high dV/dt rate with strong resistance to electromagnetic interference. It is especially recommended for use on solid state relay, motorcycle, power charger, T-tools etc. From all three terminals to external heatsink, JCT655Z provides a rated insulation voltage of 2500 V_{RMS} , complying with UL standards (File ref: E252906). Package TO-3P is RoHS compliant.



MAIN FEATURES

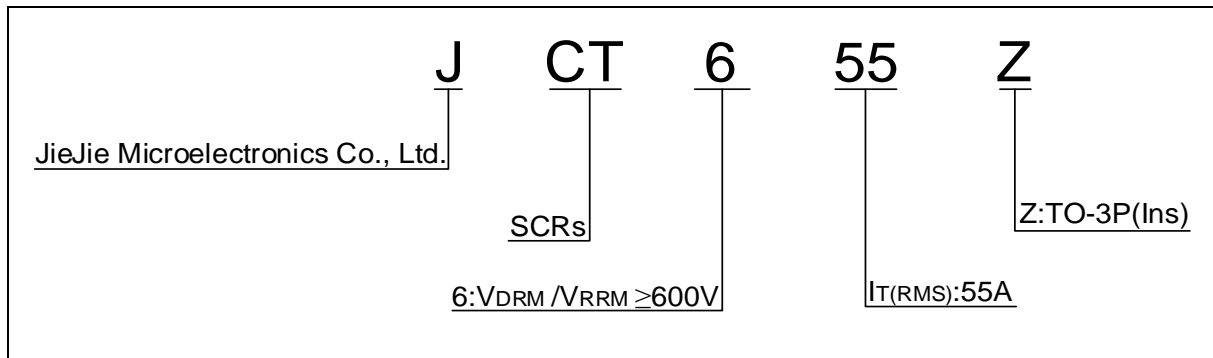
ABSOLUTE MAXIMUM RATINGS

| 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} | 600 | V |
| Repetitive peak reverse voltage ($T_j=25^\circ C$) | V_{RRM} | 600 | V |
| Average on-state current ($T_c 060^\circ C$) | $I_{T(AV)}$ | 35 | A |
| RMS on-state current ($T_c 060^\circ C$) | $I_{T(RMS)}$ | 55 | A |
| Non repetitive surge peak on-state current ($t_p=10ms, T_j=25^\circ C$) | I_{TSM} | 700 | A |
| Non repetitive surge peak on-state current ($t_p=8.3ms, T_j=25^\circ C$) | | 750 | |

I^2t value for fusing ($t_p=10ms, T_j=25^\circ C$)

$I^2t_{tt} [(t.)1102 T.72 254.64 [(t) 0.00m [(0.7>T_j2$

ORDERING INFORMATION



MARKING

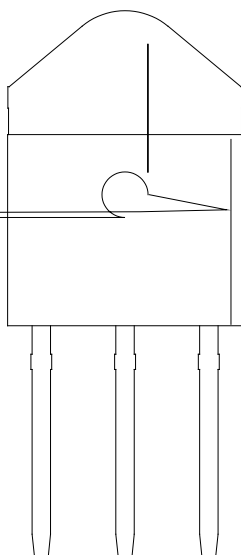


FIG.1: Maximum power dissipation versus RMS on-state current

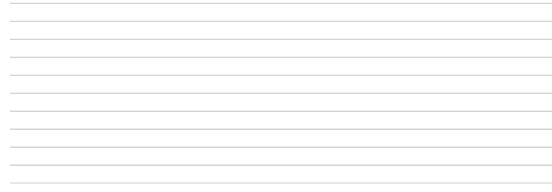


FIG.2: RMS on-state current versus case temperature1020

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



ORDERING INFORMATION

| Order code | Voltage V_{DRM}/V_{RRM} (V) | IGT(mA) | Package | Base qty. (pcs) | Delivery mode |
|------------|----------------------------------|---------|------------|--------------------|------------------|
| JCT655Z | 600 | 10-50 | TO-3P(Ins) | 30 | Tube |

Document Revision History

| Date | Revision | Changes |
|--------------|----------|---------|
| Apr.13, 2023 | A.1 | |

JCT655Z

JieJie M