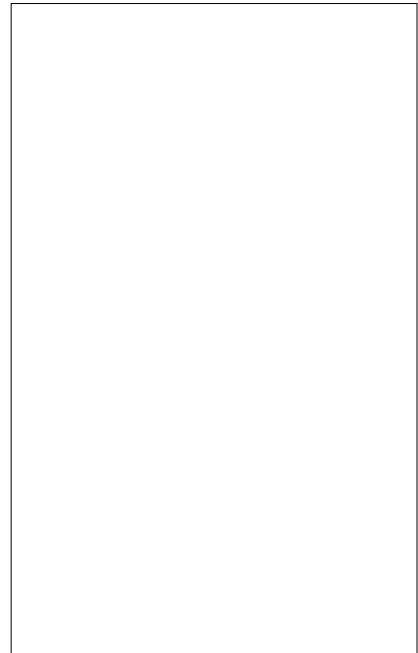


JCT625CH 25A SCR

Rev.A.1.1

DESCRIPTION:

With high ability to withstand the shock loading of large current, JCT625CH SCR provides high dV/dt rate with strong resistance to electromagnetic interference. It is especially



| | | | |
|--|----------|-----|----|
| Peak gate power | P_{GM} | 20 | W |
| Peak pulse voltage ($T_j=25$; non-repetitive, off-state; FIG.7) | V_{pp} | 0.5 | kV |

ELECTRICAL CHARACTERISTICS (unless otherwise specified)

| Symbol | Test Condition | Value | | | Unit |
|-----------|---|-------|------|------|------|
| | | MIN. | TYP. | MAX. | |
| I_{GT} | $V_D=12V R_L=33$ | - | - | 20 | mA |
| V_{GT} | | - | - | 1 | V |
| V_{GD} | $V_D=V_{DRM} T_j=150 R_L=3.3k$ | 0.2 | - | - | V |
| I_L | $I_G=1.2I_{GT}$ | - | - | 70 | mA |
| I_H | $I_T=500mA$ | - | - | 60 | mA |
| dV/dt | $V_D=400V$ Gate Open $T_j=125$ | 100 | - | - | V/s |
| | $V_D=400V$ Gate Open $T_j=150$ | 00 | - | - | |
| t_{on} | $I_G=20mA I_A=200mA I_R=20mA$ $T_j=25$ | - | 2 | - | s |
| t_{off} | | - | 50 | - | |

STATIC CHARACTERISTICS

| Symbol | Parameter | | Value(MAX.) | Unit |
|-----------|----------------------------|-----------|-------------|------|
| V_{TM} | $I_{TM}=50A t_p=380 \mu s$ | $T_j=25$ | 1.5 | V |
| V_{TO} | Threshold voltage | $T_j=150$ | 0.7 | V |
| R_D | Dynamic resistance | $T_j=150$ | 18 | P |
| I_{DRM} | $V_D=V_{DRM} V_R=V_{RRM}$ | $T_j=25$ | 5 | A |
| I_{RRM} | | $T_j=150$ | 5 | mA |

THERMAL RESISTANCES

| Symbol | Parameter | Value | Unit |
|---------------|--------------------------|-------|------|
| $R_{th(j-c)}$ | junction to case(DC) | 0.3 | /W |
| $R_{th(j-a)}$ | junction to ambient (DC) | 60 | /W |

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(mA) | Package | 1CID 1 6 /P </M |
|------------|----------------------------------|---------|---------|-----------------|
|------------|----------------------------------|---------|---------|-----------------|

PACKAGE MECHANICAL DATA

