

SEMITRONICS

TRIACS

HERMETIC PACKAGES

| | | | | | | |
|------|------------------|-------|-------|-------|-------|-------|
| TYPE | STUD/TO-3 FLANGE | SC240 | SC245 | SC250 | SC260 | SC265 |
| | PRESS-FIT | SC241 | SC246 | SC251 | SC261 | SC266 |

ELECTRICAL SPECIFICATIONS

VOLTAGE CHARACTERISTICS

| REPETITIVE PEAK OFF-STATE VOLTAGE @ | | | | | | |
|-------------------------------------|--|----------|----------|----------|----------|----------|
| V_{DRM} | $T_C=40^{\circ}\text{C TO }+100^{\circ}\text{C}$ | | | | | |
| | 200V | SC240/1B | SC245/6B | SC250/1B | SC260/1B | SC265/6B |
| | 400V | SC240/1D | SC245/6D | SC250/1D | SC260-1D | SC265/6D |
| | 500V | SC240/1E | SC245/6E | SC250/1E | SC260/1E | SC265/6E |
| | 600V | SC240/1M | SC245/6M | SC250/1M | SC260/1M | SC265/6M |
| V_{TM} | MAX ON-STATE VOLTAGE AT PEAK OF | | | | | |
| | RMS CURRENT RATING (V) | 1.83 | 1.65 | 1.65 | 1.58 | 1.38 |

CURRENT CHARACTERISTICS

| $I_{T(RMS)}$ | MAX. RMS ON-STATE CURRENT (A) | 6 | 10 | 15 | 25 | 40 |
|--------------|---|----|----|----|----|----|
| $T_{C(MAX)}$ | MAX. CASE TEMPERATURE AT RATED RMS CURRENT ($^{\circ}\text{C}$) FOR | | | | | |
| | NON-ISOLATED STUD/PRESS FIT | 82 | 80 | 86 | 80 | 81 |
| | ISOLATED STUD/NON-ISOLATED TO-3 FLANGE | 80 | 78 | 83 | 75 | 74 |
| | ISOLATED TO-3 FLANGE | 79 | 76 | 80 | 71 | 68 |
| | MAX. PEAK ONE CYCLE NON-REPETITIVE SURGE | | | | | |

| | | | | | | | |
|-----------|----------------------------------|---------------------|-----|-----|-----|-----|-----|
| I_{TSM} | CURRENT | @ 50 Hz | 74 | 90 | 90 | 230 | 275 |
| | (A) | @ 60 Hz | 80 | 100 | 100 | 250 | 300 |
| I_{DRM} | MAX. LEAKAGE | | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 |
| I_H | MAX. DC HOLDING | | | | | | |
| | CURRENT (MA) @ $T_C=+25^\circ C$ | | 50 | 50 | 50 | 75 | 75 |
| | @ $T_C=-40^\circ C$ | | 100 | 100 | 100 | 150 | 150 |
| I_L | MAX. DC LATCHING | | | | | | |
| | CURRENT (MA) @ $T_C=+25^\circ C$ | | | | | | |
| | | MT2+GATE+ | 100 | 100 | 100 | 100 | 100 |
| | | MT2-GATE- | 100 | 100 | 100 | 100 | 100 |
| | | MT2+GATE- | 200 | 200 | 200 | 200 | 200 |
| | | | | | | | |
| | | @ $T_C=-40^\circ C$ | | | | | |
| | | MT2+GATE+ | 200 | 200 | 200 | 200 | 200 |
| | | MT2-GATE- | 200 | 200 | 200 | 200 | 200 |
| | | MT@+GATE- | 400 | 400 | 400 | 400 | 400 |

BLOCK

TRIGGERING

| | | | | | | | |
|-----------------|---|-------------------|-----|-----|-----|-----|-----|
| | MT2+GATE- | @ VD=12 VDC(MADC) | | | | | |
| | | @ TC=+25°C | 50 | 50 | 50 | 50 | 80 |
| | | @ TC=-40°C | 80 | 80 | 80 | 80 | 120 |
| V _{GT} | MAX. REQUIRED DC GATE VOLTAGE TO TRIGGER, MT2+GATE+, MT2-GATE-, | | | | | | |
| | MT2+GATE- | @ VD=12 VDC | | | | | |
| | | @ TC=+25°C | 2.5 | 2.5 | 2.5 | 2.5 | 2.5 |
| | | @ TC=-40°C | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 |

MECHANICAL SPECIFICATIONS

| | | | | | |
|------------------------|-------------|------------|-------------|-------------|-------------|
| PACKAGE OUTLINE NUMBER | 241(SC241) | 241(SC241) | 241(SC241) | 251(SC261) | 251(SC261) |
| | 242,3,4,5 | 242,3,4,5 | 242,3,4,5 | 252,3,4,5 | 252,3,4,5 |
| | & 6 (SC240) | & 6(SC240) | & 6 (SC240) | & 6 (SC260) | & 6 (SC260) |

