

# SMTC1-500F

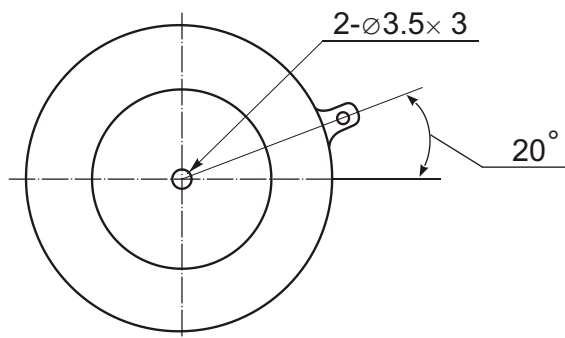


## Fast Turn-off Thyristor

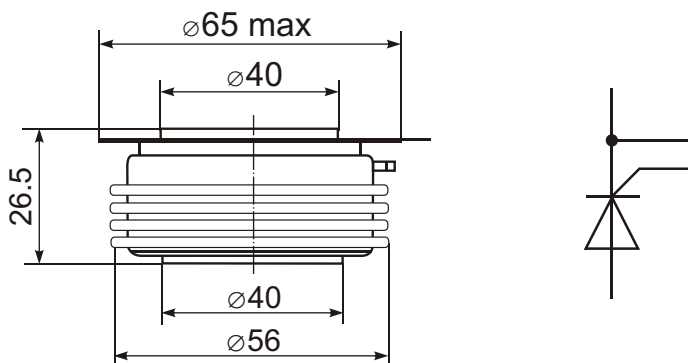


| Type          | $V_{RSM}$ | $V_{RRM}$ ,<br>$V_{DRM}$ |
|---------------|-----------|--------------------------|
| SMTC1-500F-6  | 700       | 600                      |
| SMTC1-500F-8  | 900       | 800                      |
| SMTC1-500F-10 | 1100      | 1000                     |
| SMTC1-500F-12 | 1300      | 1200                     |
| SMTC1-500F-14 | 1500      | 1400                     |
| SMTC1-500F-16 | 1700      | 1600                     |

| Type       | $I_{TAVM}$<br>$T_c=55^\circ\text{C}$ | $I_{TRMS}$ | $I_{TSM}$ | $(di/dt)_{cr}$   | $(dv/dt)_{cr}$   | $V_{TM}$ | $I_{TM}$ | $V_{TO}$ | $r_T$     | $V_{GT}$ | $I_{GT}$ | $T_{VJM}$        | $R_{thJC}$ | F  |
|------------|--------------------------------------|------------|-----------|------------------|------------------|----------|----------|----------|-----------|----------|----------|------------------|------------|----|
|            | A                                    | A          | kA        | A/ $\mu\text{s}$ | V/ $\mu\text{s}$ | V        | kA       | V        | $m\Omega$ | V        | mA       | $^\circ\text{C}$ | K/W        | kN |
| SMTC1-500F | 500                                  | 890        | 6.4       | 300              | 500-1000         | 2.7      | 1.5      | 1.20     | 0.45      | 2.5      | 250      | 115              | 0.035      | 20 |



| Type               | $t_q$ ( $T_c=105^\circ\text{C}$ ) |
|--------------------|-----------------------------------|
|                    | $\mu\text{s}$                     |
| SMTC1-500F-xx-OED6 | 16                                |
| SMTC1-500F-xx-NED6 | 20                                |
| SMTC1-500F-xx-MED6 | 25                                |
| SMTC1-500F-xx-LED6 | 30                                |
| SMTC1-500F-xx-KED6 | 40                                |



### Features:

- Hermetic metal case with ceramic insulator
- Capsule packages for double sided cooling
- International standard case
- Amplifying gates

### Typical Applications:

- DC motor control
- AC motor soft starter
- Controlled rectifiers
- AC controllers