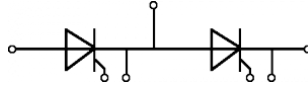


Thyristor module PSKT 352M

$I_{T(RMS)} = 2 \times 518 \text{ A}$
 $I_{T(AV)} = 2 \times 330 \text{ A}$
 $V_{RRM} = 800-1800 \text{ V}$

Preliminary Data Sheet



| V_{RSM} V | V_{RRM} V | Type |
|----------------|----------------|--------------|
| 900 | 800 | PSKT 352M/08 |
| 1100 | 1000 | PSKT 352M/10 |
| 1300 | 1200 | PSKT 352M/12 |
| 1500 | 1400 | PSKT 352M/14 |
| 1700 | 1600 | PSKT 352M/16 |
| 1900 | 1800 | PSKT 352M/18 |

| Symbol | Test Conditions | Maximum Ratings | | |
|----------------|--|----------------------------|---------------------|---------------------------------------|
| $I_{T(RMS)}$ | $T_{VJ} = 125^\circ\text{C}$ | half sine | 518 | A |
| $I_{T(AV)}$ | $T_C = 85^\circ\text{C}$ | | 330 | A |
| I_{TSM} | $T_{VJ} = 125^\circ\text{C}$ | $t = 10 \text{ ms}$ | half sine | 11000 A |
| $\int i^2 dt$ | $T_{VJ} = 125^\circ\text{C}$ | $t = 10 \text{ ms}$ | half sine | 605 $\text{A}^2 \text{ s} \cdot 10^3$ |
| $(di/dt)_{cr}$ | $T_{VJ} = 125^\circ\text{C}$ | $t_r \leq 0,5 \mu\text{s}$ | gate source 1,5A | 200 $\text{A}/\mu\text{s}$ |
| $(dv/dt)_{cr}$ | $T_{VJ} = 125^\circ\text{C}$ | $V_{DM} = 2/3 V_{DRM}$ | | 1000 $\text{V}/\mu\text{s}$ |
| T_{VJ} | | -40 ... + 125 | | $^\circ\text{C}$ |
| T_{VJM} | | 125 | | $^\circ\text{C}$ |
| T_{stg} | | -40 ... + 125 | | $^\circ\text{C}$ |
| V_{ISOL} | 50 HZ, RMS $I_{ISOL} \leq 1 \text{ mA}$ | $t = 1 \text{ min}$ | min. 3000 | $\text{V} \sim$ |
| M_d | Terminal connection torque (M10) | | 12,0 | Nm |
| | Mounting torque (M6) | | 6,0 | Nm |
| Weight | typ. | | 820 | g |

Features

- Isolated mounting base 3000V~
- Pressure contact technology with increased power cycling capability

Applications

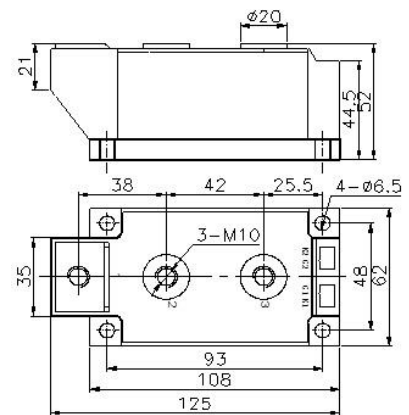
- AC/DC Motor drives
- Various rectifiers
- DC supply for PWM inverter

Advantages

- Easy to mount
- Space and weight savings
- Improved temperature and power cycling capability

Package, style and outline

Dimensions in mm (1mm = 0.0394")



| Symbol | Test Conditions | Characteristic Value | | |
|--------------------|---|------------------------------|--------|--------------------------------|
| $I_{RRM}; I_{DRM}$ | $V_R = V_{RRM}$ $V_D = V_{DRM}$ | $T_{VJ} = 125^\circ\text{C}$ | \leq | 25 mA |
| V_{TM} | $I_{TM} = 1050 \text{ A}$ | $T_{VJ} = 25^\circ\text{C}$ | \leq | 1,45 V |
| V_{TO} | For power-loss calculations only | | | 0,95 V |
| r_T | $T_{VJ} = 125^\circ\text{C}$ | | | 0,36 $\text{m}\Omega$ |
| I_{GT} | | | | 30-180 mA |
| V_{GT} | $V_A = 12 \text{ V}$ $I_A = 1 \text{ A}$ | $T_{VJ} = 25^\circ\text{C}$ | | 1,0-2,5 V |
| I_H | | | | 20-180 mA |
| V_{GT} | $V_{DM} = 2/3 V_{DRM}$ | $T_{VJ} = 125^\circ\text{C}$ | | 0,2 V |
| $R_{th(j-c)}$ | Per chip; Single side cooled | | | 0,09 $^\circ\text{C}/\text{W}$ |