

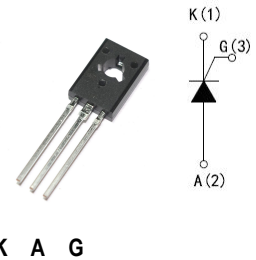
## TSE2P4M

### Thyristors

DRAWIN

#### General Description

- ◆ Package: TO-126
- ◆ Glass passivated thyristors in a plastic envelope, Intended for use in applications requiring high bidirectional blocking voltage capability and high thermal cycling performance. Typical applications include motor control, industrial and domestic lighting, heating and static switching.



#### Limiting Values

| SYMBOL       | Spec    | UNIT |
|--------------|---------|------|
| $V_{DRM}$    | 600     | V    |
| $V_{RRM}$    | 600     | V    |
| $I_{T(AV)}$  | 2       | A    |
| $I_{T(RMS)}$ | 3       | A    |
| $I_{TSM}$    | 20      | A    |
| $T_J$        | 125     | °C   |
| $T_{atg}$    | -40~125 | °C   |

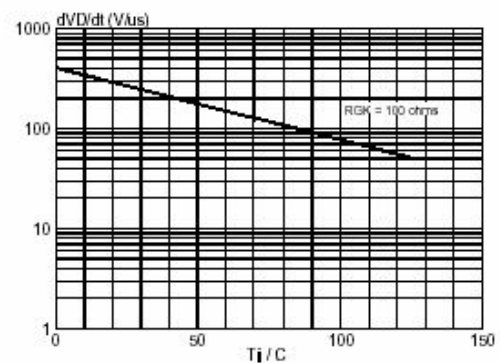
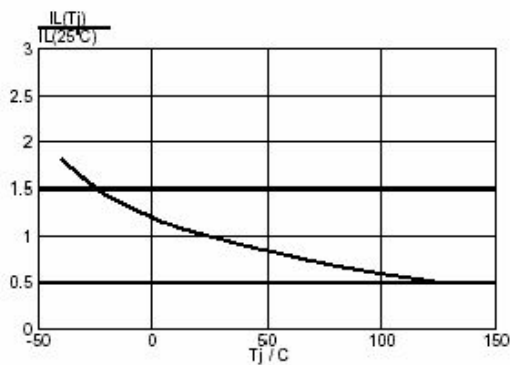
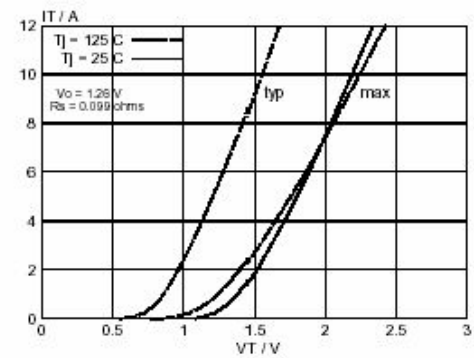
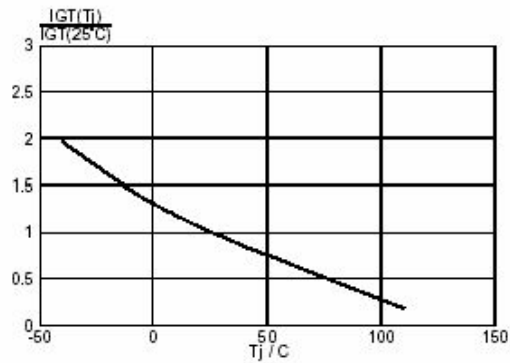
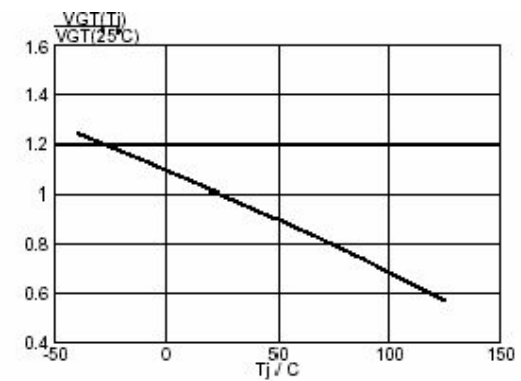
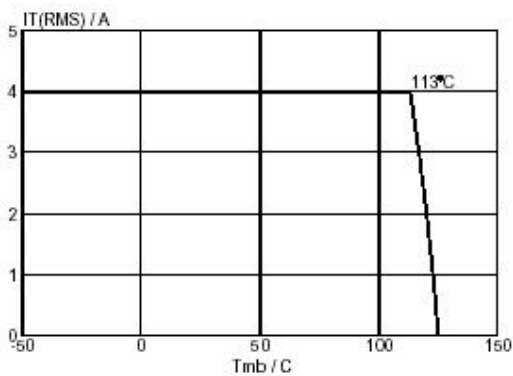
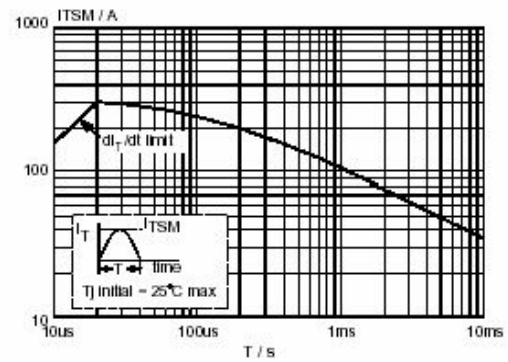
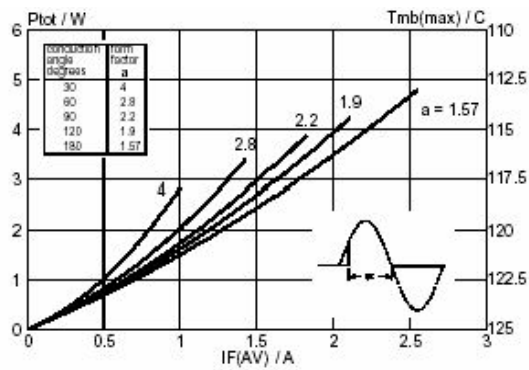
#### Static Characteristics

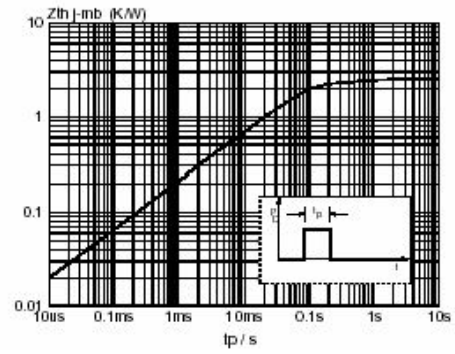
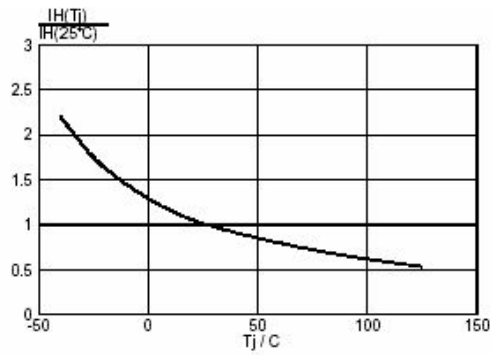
| SYMBOL | UNIT | SPEC |      |     | CONDITION                      |
|--------|------|------|------|-----|--------------------------------|
|        |      | MIN  | TYP  | MAX |                                |
| VDRM   | V    | 600  | 650  |     |                                |
| VRRM   | V    | 600  | 650  |     | IR=50uA                        |
| IDRMI  | uA   |      |      | 20  | VDRM=600V                      |
| VTM    | V    |      | 1.3  | 1.7 | IT=4A                          |
| IH     | mA   |      |      | 5   | IT=0.1A, IGT=0.2mA             |
| IL     | mA   |      | 0.17 | 10  | VD=12V, IGT=0.1A               |
| IGT    | u A  | 10   | 30   | 100 | VD=6V, RL=100Ω                 |
| VGT    | V    | 0.5  |      | 0.8 | VD=6V, RL=100Ω                 |
| IGM    | A    |      |      | 0.5 |                                |
| VGM    | V    |      |      | 5   |                                |
| VRGM   | V    |      |      | 5   |                                |
| dv/dt  | V/us |      | 50   |     | VDM=67%VDRM, Tj=110°C, RL=100Ω |
| dIt/dt | A/us |      |      | 50  | IT=10A, IG=50mA, Dig=50mA/us   |
| VGD    | V    | 0.1  |      |     | VDRM=400V, RGR=1KΩ, Tj=110°C   |

#### Thermal Resistances

| SYMBOL  | SPEC | UNIT |
|---------|------|------|
| Rthj-mb | 75   | °C/W |
| Rthj-a  | 200  | °C/W |

Typical Characteristics





## Mechanical Dimensions

