

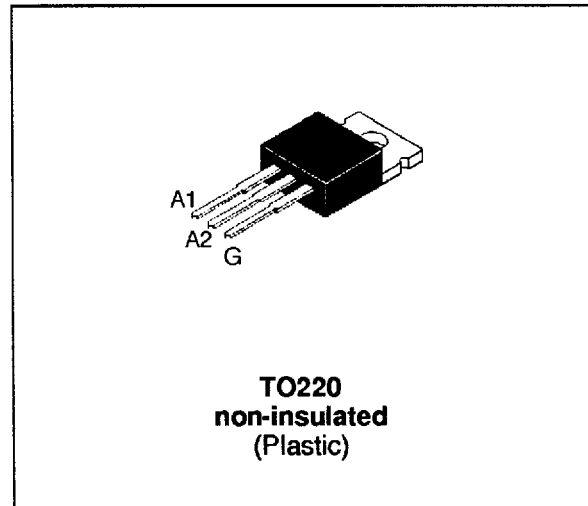
STANDARD TRIACS

FEATURES

- $I_{T(RMS)} = 25A$
- $V_{DRM} = 400V$ to $800V$
- High surge current capability

DESCRIPTION

The T25xxxH series of triacs uses a high performance MESA GLASS technology. These parts are intended for general purpose switching and phase control applications.



ABSOLUTE RATINGS (limiting values)

| Symbol | Parameter | | Value | Unit |
|--------------------|--|-------------------------|----------------------------|------------|
| $I_{T(RMS)}$ | RMS on-state current (360° conduction angle) | $T_c = 80^\circ C$ | 25 | A |
| I_{TSM} | Non repetitive surge peak on-state current (T_j initial = $25^\circ C$) | $t_p = 8.3$ ms | 262 | A |
| | | $t_p = 10$ ms | 250 | |
| I^2t | I^2t Value for fusing | $t_p = 10$ ms | 312 | A^2s |
| di/dt | Critical rate of rise of on-state current $I_G = 500$ mA $di_G/dt = 1$ A/ μs . | Repetitive F = 50 Hz | 10 | A/ μs |
| | | Non Repetitive | 50 | |
| T_{stg} T_j | Storage and operating junction temperature range | | - 40, + 150 - 40, + 125 | $^\circ C$ |
| TI | Maximum lead temperature for soldering during 10s at 4.5mm from case | | 260 | $^\circ C$ |

| Symbol | Parameter | Voltage | | | | Unit |
|------------------------|--|---------|-----|-----|-----|------|
| | | D | M | S | N | |
| V_{DRM} V_{RRM} | Repetitive peak off-state voltage $T_j = 125^\circ C$ | 400 | 600 | 700 | 800 | V |

Fig.1 : Maximum RMS power dissipation versus RMS on-state current.

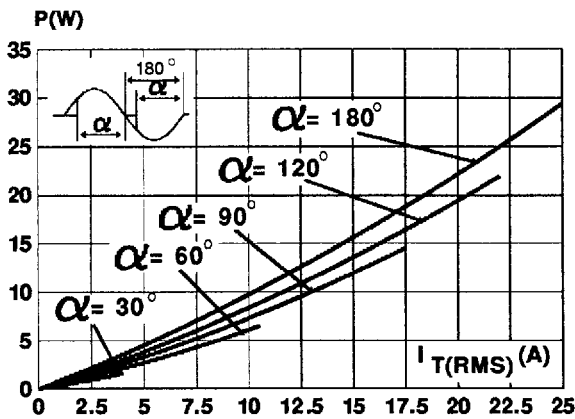


Fig.2 : Correlation between maximum RMS power dissipation and maximum allowable temperature (Tamb and Tcase) for different thermal resistances heatsink + contact.

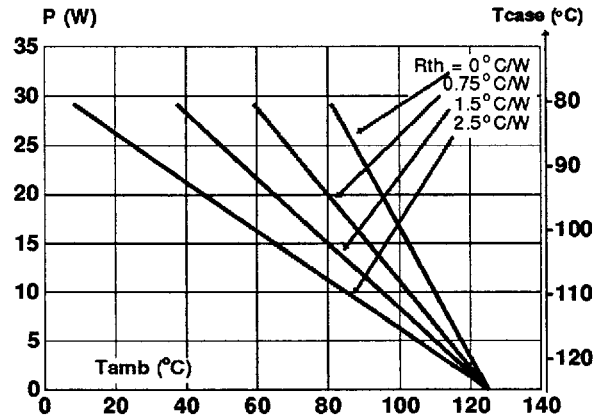


Fig.3 : RMS on-state current versus case temperature.

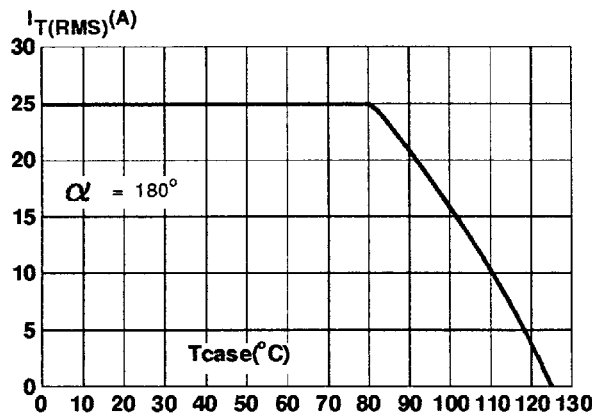


Fig.4 : Relative variation of thermal impedance versus pulse duration.

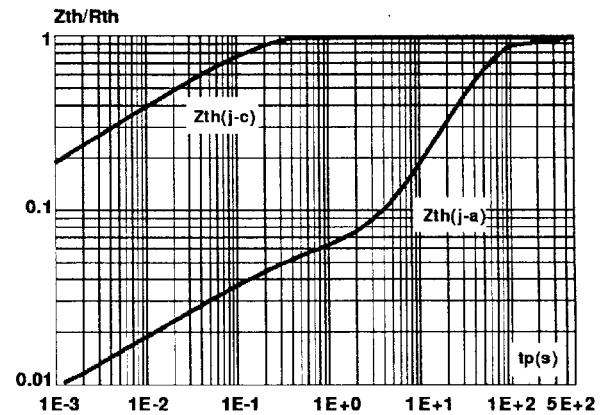


Fig.5 : Relative variation of gate trigger current and holding current versus junction temperature.

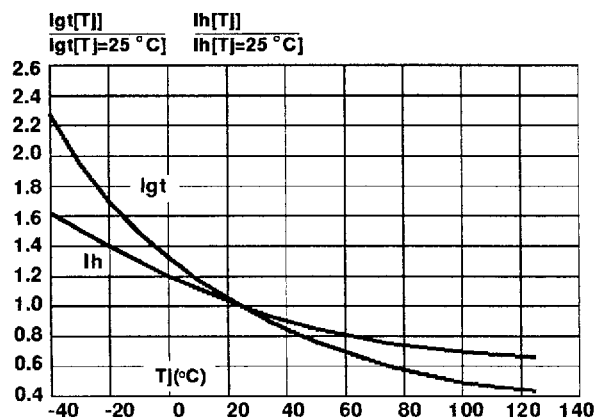
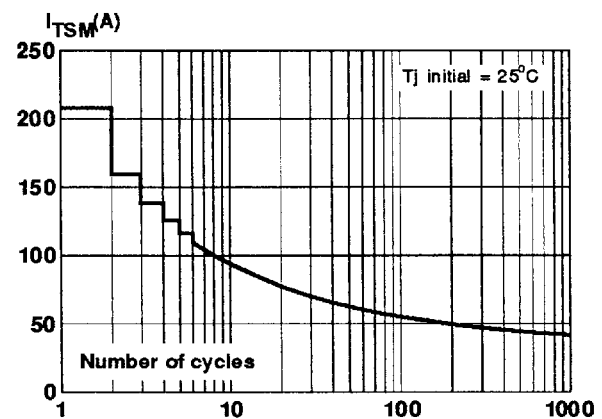


Fig.6 : Non repetitive surge peak on-state current versus number of cycles.



T25xxxH

Fig.7 : Non repetitive surge peak on-state current for a sinusoidal pulse with width : $t \leq 10\text{ms}$, and corresponding value of I^2t .

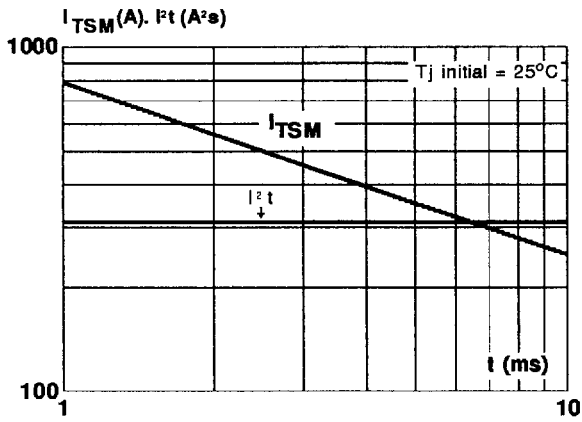
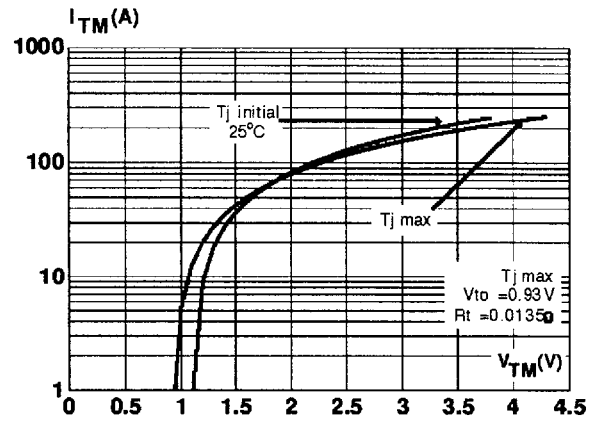
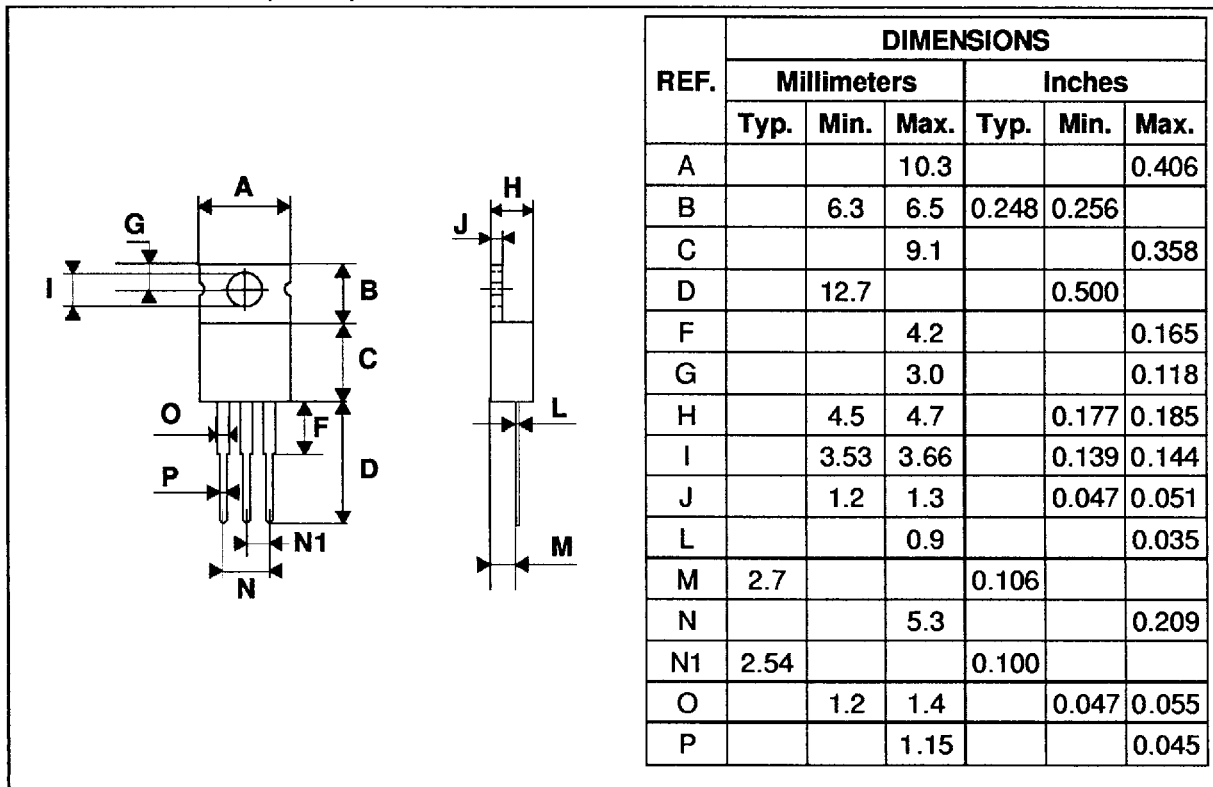


Fig.8 : On-state characteristics (maximum values).



PACKAGE MECHANICAL DATA
 TO220 Non-insulated (Plastic)


Marking : type number
 Weight : 1.8 g

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