



## T1210H-6E 12A TRIAC

Rev.A.1.1

### DESCRIPTION:

The T1210H-6E triac is suitable for general purpose AC switching. It can be used as an ON/OFF function in applications such as heating regulation, induction motor starting circuits, for phase control operation in light dimmers, motor speed controllers. Compared to traditional triacs, T1210H-6E provides a very high switching capability up to junction temperatures of 150°C. It can be driven directly through the MCU I/O port. Package TO-263 is RoHS compliant.

|  |          |    |    |
|--|----------|----|----|
| Peak gate power  | $P_{GM}$ | 10 | W  |
| Peak pulse voltage<br>( $T_j=25$ ; non-repetitive,off-state;FIG.8) | $V_{pp}$ | 4  | kV |

**ELECTRICAL CHARACTERISTICS** (unless otherwise specified)

| Symbol   | Test Condition                      | Quadrant | Value |    | Unit |
|----------|-------------------------------------|----------|-------|----|------|
| $I_{GT}$ | $V_D=12V R_L=33$                    | - -      | MAX.  | 10 | mA   |
| $V_{GT}$ |                                     | - -      | MAX.  | 1  | V    |
| $V_{GD}$ | $V_D=V_{DRM} T_j=150$<br>$R_L=3.3k$ | - ÈSb    |       |    |      |



**FIG.1:** Maximum power dissipation vs. temperature

FIG.7: Relative variations of gate trigger current, holding current and latching current versus junction temperature

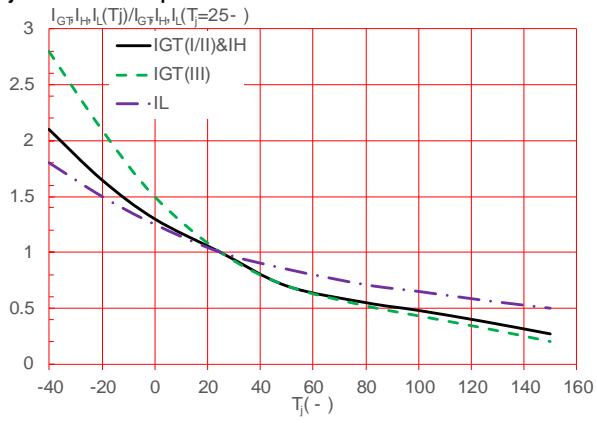


FIG.8 Test circuit for inductive and resistive loads to IEC-61000-4-5 standards



## ORDERING INFORMATION

| Order code   | Voltage<br>$V_{DRM}/V_{RRM}$ (V) | IGT(mA) | Package | Base qty.<br>(pcs) | Delivery mode |
|--------------|----------------------------------|---------|---------|--------------------|---------------|
|              |                                  | H- I- J |         |                    |               |
| T1210H-6E    | 600                              | 10      | TO-263  | 50                 | Tube          |
| T1210H-6E-TR |                                  |         |         | 800                | Tape & Reel   |

## Document Revision History

| Date         | Revision | Changes      |
|--------------|----------|--------------|
| Apr.11, 2023 | A.1.0    | Last updated |





