**T3**

| | | | |
|---|---|---|---|
| Peak pulse voltage ($T_j$=25 ; non-repetitive,off-state;FIG.8) | $V_{pp}$ | 1 | kV |

## ELECTRICAL CHARACTERISTICS ($T_j$=25 unless otherwise specified)

| Symbol | Test Condition | Quadrant | Value | | Unit |
|---|---|---|---|---|---|
| $I_{GT}$ | $V_D$ =12V $R_L$ =33Ω | - - | MAX. | 35 | mA |
| $V_{GT}$ | | - - | MAX. | 1.3 | V |
| $V_{GD}$ | $V_D$ =$V_{DRM}$ $T_j$ =150 $R_L$ =3.3kΩ | - - | MIN. | 0.15 | V |
| $I_L$ | $I_G$ =1.2$I_{GT}$ | - | MAX. | 70 | mA |
| | | | | 80 | |
| $I_H$ | $I_T$ =500mA | | MAX. | 50 | mA |
| dV/dt | $V_D$=540V Gate Open $T_j$ =150 | | MIN. | 1000 | V/μs |
| (dI/dt)c | (dV/dt)c=20V/μs, $T_j$=150 | | MIN. | 18 | A/ms |
| $t_{on}$ | $I_G$=40mA $I_A$=200mA $I_R$=20mA $T_j$=25 | | TYP. | 10 | μs |
| $t_{off}$ | | | | 80 | |

## STATIC CHARACTERISTICS

| Symbol | Parameter | | Value(MAX.) | Unit |
|---|---|---|---|---|
| $V_{TM}$ | $I_{TM}$ =42A $t_p$=380μs | $T_j$=25 | 1.5 | V |
| $V_{TO}$ | Threshold voltage | $T_j$=150 | 0.7 | V |
| $R_D$ | Dynamic resistance | $T_j$=150 | 16 | mΩ |
| $I_{DRM}$ | $V_D$ =$V_{DRM}$ $V_R$ =$V_{RRM}$ | $T_j$=25 | 8 | μA |
| $I_{RRM}$ | | $T_j$=150 | 8 | mA |

## THERMAL RESISTANCES

| Symbol | Parameter | Value | Unit |
|---|---|---|---|
| $R_{th(j-c)}$ | junction to case (AC) | 0.8 | /W |
| $R_{th(j-a)}$ | junction to ambient (AC, in free air, S=2cm$^2$) | 45 | /W |

## ORDERING INFORMATION

T 30 35 H -8 0.003 Tc 0 0.003

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

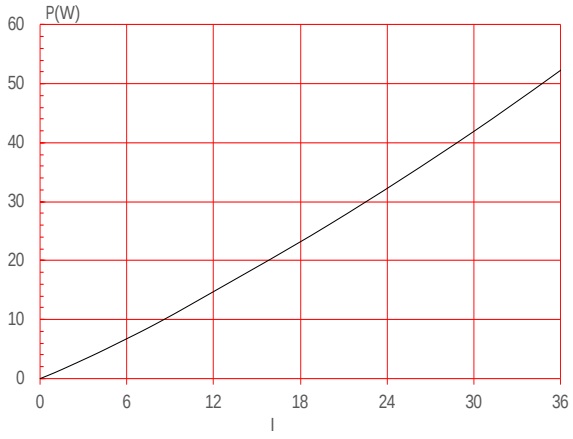
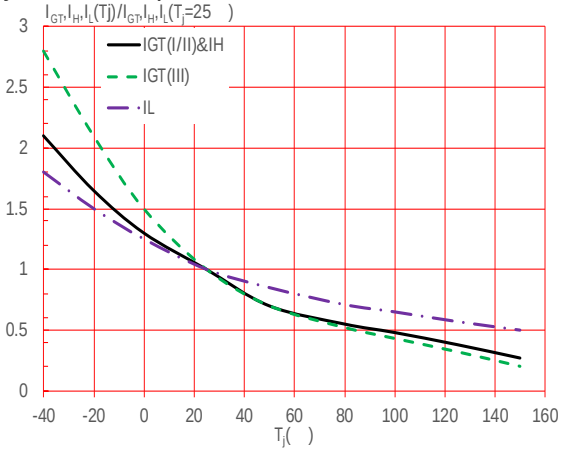
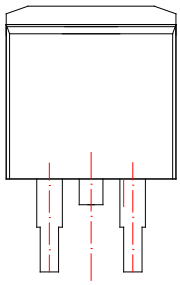



**FIG.2:** RMS on-state current versus case temperature AJ71 583.92 13.85 167.934.eW nB87024 0 0 -0.008

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



## PACKAGE MECHANICAL DATA



| Ref. | Dimensions | | | | | |
|---|---|---|---|---|---|---|
| | Millimeters | | | Inches | | |
| | Min. | Typ. | Max. | Min. | Typ. | Max. |
| A | 9.90 | | 10.20 | 0.390 | | 0.402 |
| | | | | | | |
| B | 14.70 | | 15.80 | 0.579 | | 0.622 |
| | | | | | | |
| C | 9.40 | | 9.60 | 0.370 | | 0.378 |
| | | | | | | |
| D | 2.40 | | | 0.094 | | |
| E | 1.20 | | 1.50 | 0.047 | | 0.059 |
| F | 0.75 | | 0.85 | 0.029 | | 0.033 |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |

## DELIVERY MODE