

ELECTRICAL CHARACTERISTICS (unless otherwise specified)

| Symbol | Test Condition | Quadrant | Value | | Unit |
|-------------|---|----------|-------|-----|------|
| I_{GT} | $V_D=12V$ $R_L=33$ | ALL | MAX. | 5 | mA |
| V_{GT} | | ALL | MAX. | 1.3 | V |
| V_{GD} | $V_D=V_{DRM}$ $T_j=125$ $R_L=3.3k$ | ALL | MIN. | 0.2 | V |
| I_L | $I_G=1.2I_{GT}$ | - - | MAX. | 5 | mA |
| | | | | 10 | |
| I_H | $I_T=50mA$ | | MAX. | 5 | mA |
| dV/dt | $V_D=540V$ Gate Open $T_j=110$ | | MIN. | 20 | V s |
| $(dV/dt)_c$ | $(dI/dt)_c=0.44A/ms$, $T_j=110$ | | MIN. | 1 | |
| t_{on} | $I_G=40mA$ $I_A=200mA$ $I_R=20mA$ $T_j=25$ | | TYP. | 2 | s |
| t_{off} | | | | 20 | |

STATIC CHARACTERISTICS

| Symbol | Parameter | | Value(MAX.) | Unit |
|----------|---------------------------|-----------|-------------|------|
| V_{TM} | $I_{TM}=1.4A$ $t_p=380$ s | $T_j=25$ | 1.45 | V |
| V_{TO} | Threshold voltage | $T_j=125$ | 0.96 | V |
| R_D | Dynamic resistance | T | | |

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



FIG.2: RMS on-state current versus case temperature

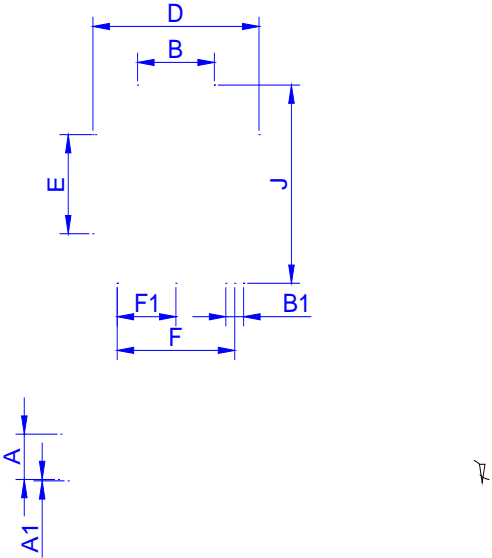
ORDERING INFORMATION

| Order code | Voltage V_{DRM}/V_{RRM} (V) | IGT(mA) | Package | Base qty. (pcs) | Delivery mode |
|--------------|----------------------------------|---------|------------|--------------------|------------------|
| | | - - - | | | |
| JST131W-800T | 800 | 5 | SOT-223-2L | 4,000 | Tape & Reel |

Document Revision History

| Date | Revision | Changes |
|--------------|----------|--------------------------------|
| Apr.14, 2023 | A.1.0 | Last updated |
| Oct.24, 2025 | A.1.1 | Revise PACKAGE MECHANICAL DATA |

PACKAGE MECHANICAL DATA



JST131W-800T

