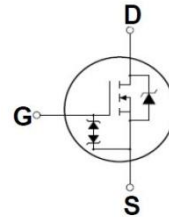
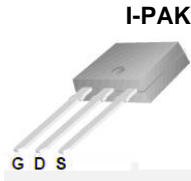


N-channel MOSFET

Features

- Low gate charge
- 100% avalanche tested
- Improved dv/dt capability
- RoHS compliant
- Halogen free package
- JEDEC Qualification

| BV_{DSS} | I_D | $R_{DS(on)MAX}$ |
|------------|-------|-----------------|
| 600V | 2A | <4.0 Ω |



| Device | Package | Marking | Remark |
|-----------------------|-------------|-----------------------|--------------|
| TMD2N60Z / TMU2N60Z | D-PAK/I-PAK | TMD2N60Z / TMU2N60Z | RoHS |
| TMD2N60ZG / TMU2N60ZG | D-PAK/I-PAK | TMD2N60ZG / TMU2N60ZG | Halogen Free |

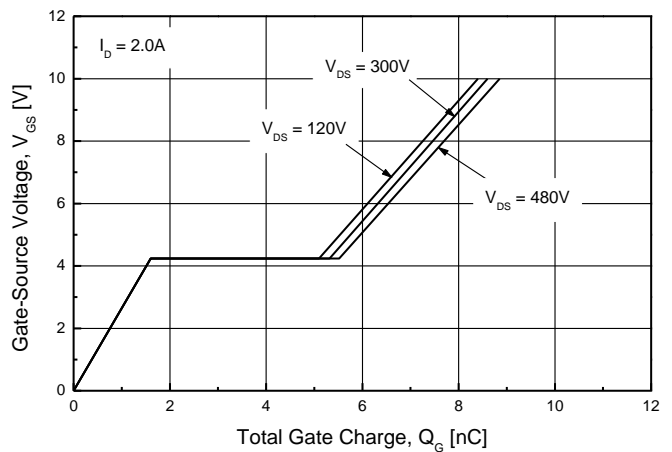
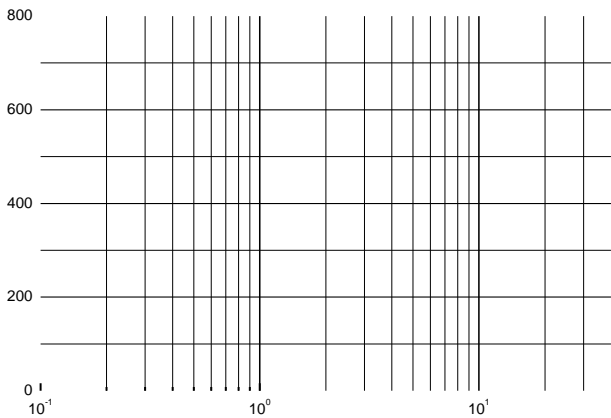
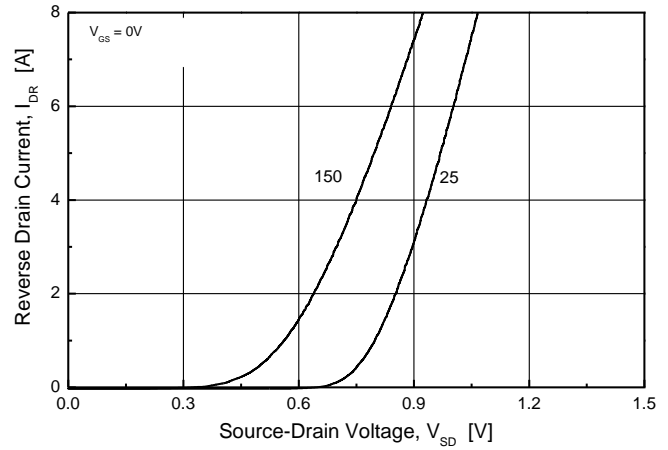
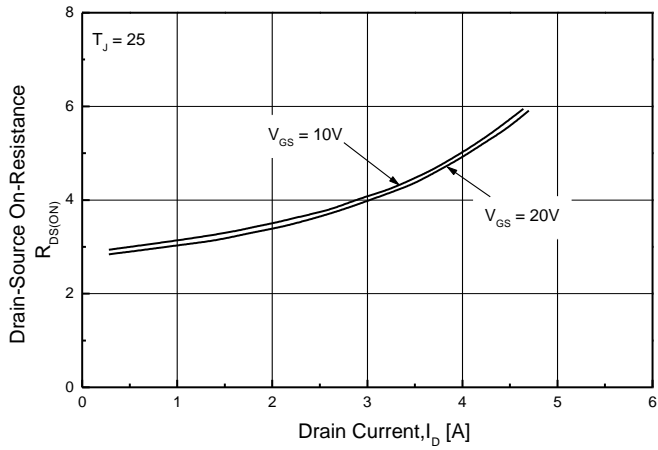
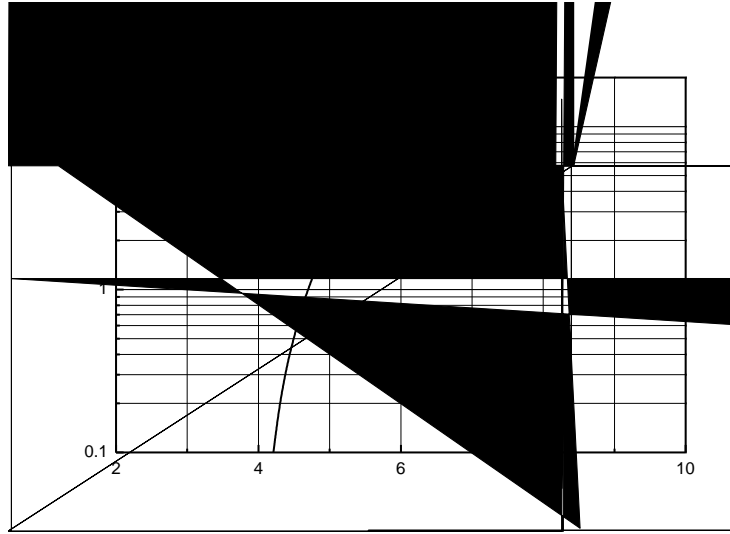
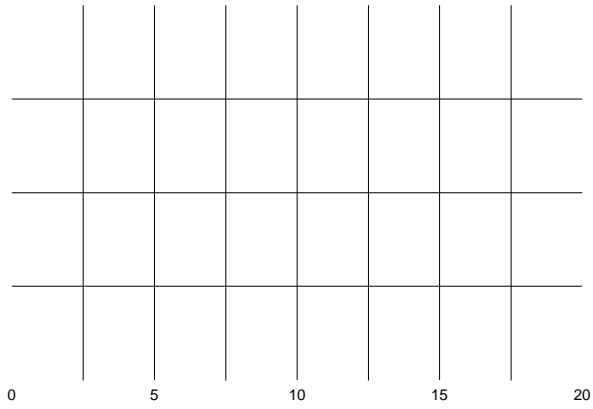
Absolute Maximum Ratings

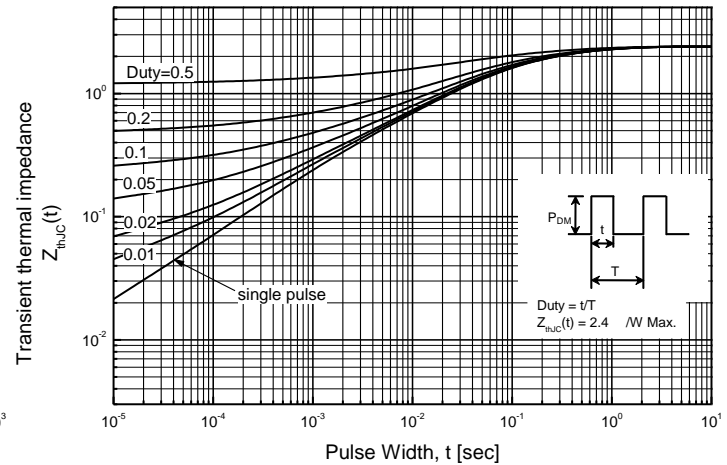
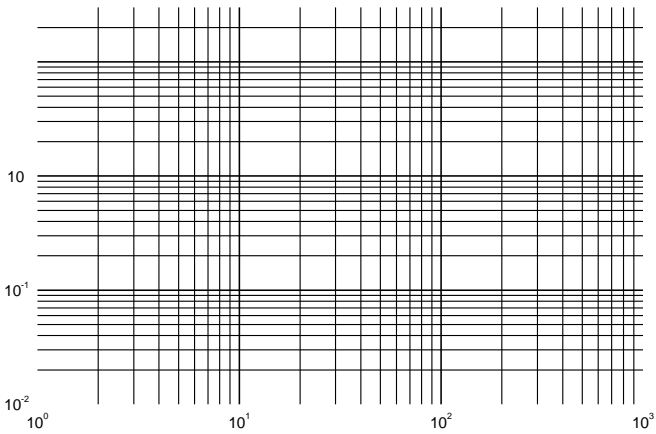
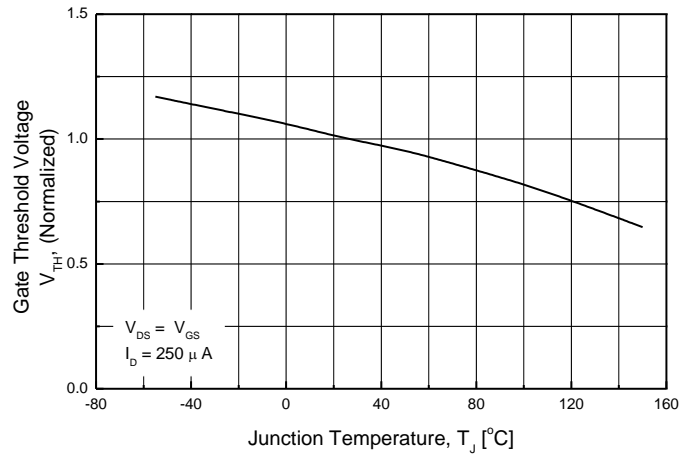
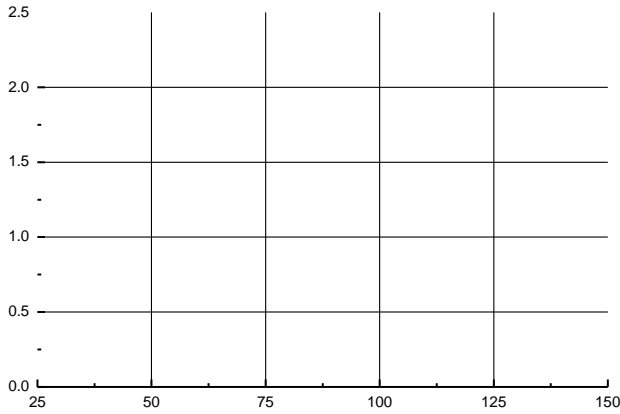
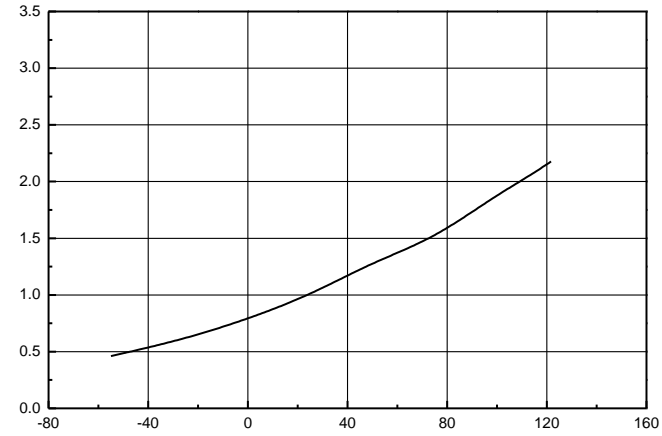
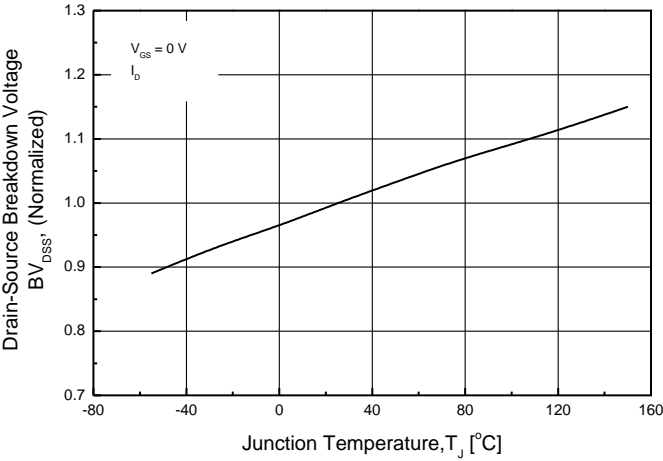
| Parameter | Symbol | TMD2N60Z(G)/TMU2N60Z(G) | Unit |
|--|----------------|-------------------------|-------|
| Drain-Source Voltage | V_{DSS} | 600 | V |
| Gate-Source Voltage | V_{GS} | 30 | V |
| Continuous Drain Current | I_D | $T_C = 25$ | 2 |
| | | $T_C = 100$ | 1.4 |
| Pulsed Drain Current (Note 1) | I_{DM} | 8 | A |
| Single Pulse Avalanche Energy (Note 2) | E_{AS} | 128 | mJ |
| Repetitive Avalanche Current (Note 1) | I_{AR} | 2 | A |
| Repetitive Avalanche Energy (Note 1) | E_{AR} | 5.2 | mJ |
| Power Dissipation | P_D | $T_C = 25$ | 52 |
| | | Derate above 25 | 0.416 |
| Peak Diode Recovery dv/dt (Note 3) | dv/dt | 4.5 | V/ns |
| Operating Junction and Storage Temperature Range | T_J, T_{STG} | -55~150 | |
| Maximum lead temperature for soldering purposes, | T_L | 300 | |

* Limited only by maximum junction temperature

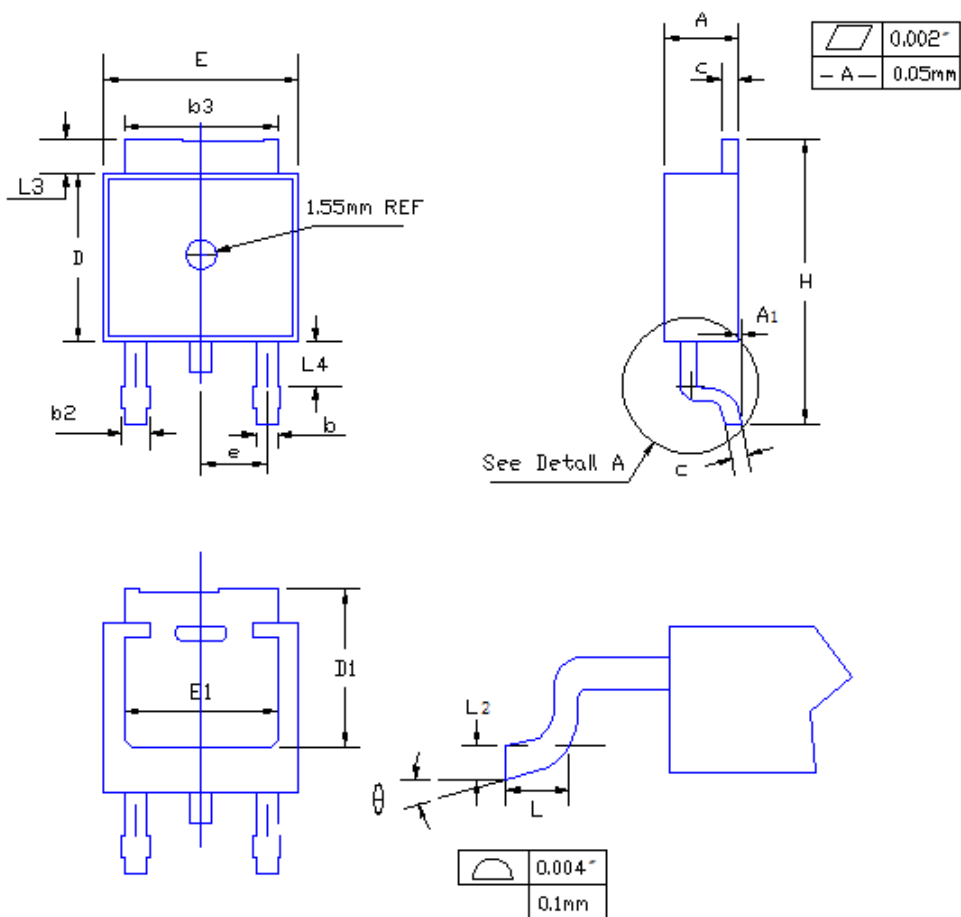
Thermal Characteristics

| Parameter | Symbol | TMD2N60Z(G)/TMU2N60Z(G) | Unit |
|---|-----------------|-------------------------|------|
| Maximum Thermal resistance, Junction-to-Case | $R_{\theta JC}$ | 2.4 | /W |
| Maximum Thermal resistance, Junction-to-Ambient | $R_{\theta JA}$ | 110 | /W |



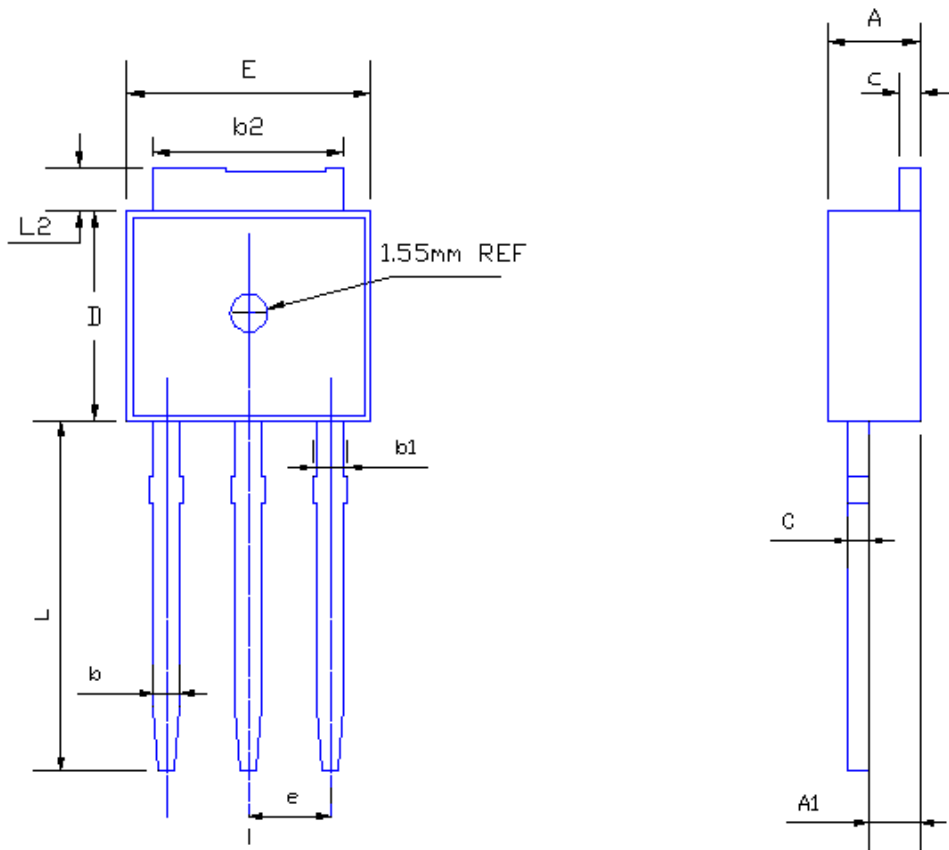


TO-252 (D-PAK) MECHANICAL DATA



| SYMBOL | MILLIMETERS | |
|----------|-------------|-------|
| | MIN | MAX |
| A | 2.19 | 2.38 |
| A1 | — | 0.13 |
| b | 0.64 | 0.89 |
| b2 | 0.84 | 1.14 |
| b3 | 5.21 | 5.46 |
| c | 0.46 | 0.61 |
| D | 5.97 | 6.22 |
| D1 | 5.21 | — |
| E | 6.35 | 6.73 |
| E1 | 4.83 | — |
| e | 2.29BSC | |
| H | 9.65 | 10.41 |
| L | 1.40 | 1.78 |
| L2 | 0.51BSC | |
| L3 | 0.89 | 1.27 |
| L4 | 0.64 | 1.01 |
| θ | 0 | 8 |

TO-251 (I-PAK) MECHANICAL DATA



| SYMBOL | MILLIMETERS | |
|--------|-------------|------|
| | MIN | MAX |
| A | 2.19 | 2.38 |
| A1 | 1.04 | 1.23 |
| b | 0.64 | 0.89 |
| b1 | 0.84 | 1.14 |
| b2 | 5.23 | 5.48 |
| c | 0.46 | 0.61 |
| D | 5.91 | 6.28 |
| E | 6.21 | 6.59 |
| e | 2.28 TYP | |
| L | 8.89 | 9.65 |
| L2 | 0.89 | 1.27 |