



**Thermal resistance**

| Parameter                                    | Symbol     | Min. | Typ. | Max. | Unit  |
|--|------------|------|------|------|-------|
| Thermal resistance, junction - case          | $R_{thJC}$ | -    | -    | 56   | ∇ C/W |
| Thermal resistance, junction - ambient       | $R_{thJA}$ | -    | -    | 180  | ∇ C/W |
| Soldering temperature, wavesoldering for 10s | $T_{sold}$ | -    | -    | 265  |       |



|                                |              |            |    |
|--------------------------------|--------------|------------|----|
| Pulsed Drain Current           | $I_{DM}$     | 18         | A  |
| Total Power Dissipation        | $P_D@T_C=25$ | 2.2        | W  |
| Total Power Dissipation        | $P_D@T_A=25$ | 0.69       | W  |
| Operating Junction Temperature | $T_J$        | -55 to 150 |    |
| Storage Temperature            | $T_{STG}$    | -55 to 150 |    |
| Single Pulse Avalanche Energy  | $E_{AS}$     | 35         | mJ |

### P Channel Absolute Maximum Ratings



|                              |      |                                  |   |      |   |    |
|------------------------------|------|----------------------------------|---|------|---|----|
| Input capacitance            | Ciss | f = 1MHz<br>V <sub>DS</sub> =25V | - | 1150 | - | pF |
| Output capacitance           | Coss |                                  | - | 290  | - |    |
| Reverse transfer capacitance | Crss |                                  | - |      |   |    |

**N Channel characteristics curve**

Fig.1 Power Dissipation Derating Curve

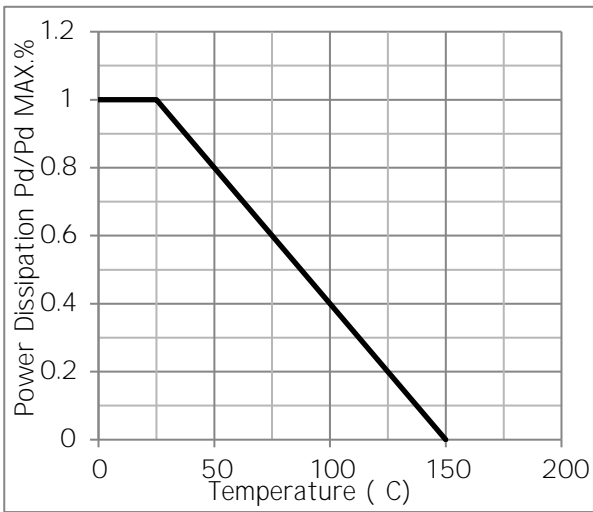


Fig.2 Typical output Characteristics

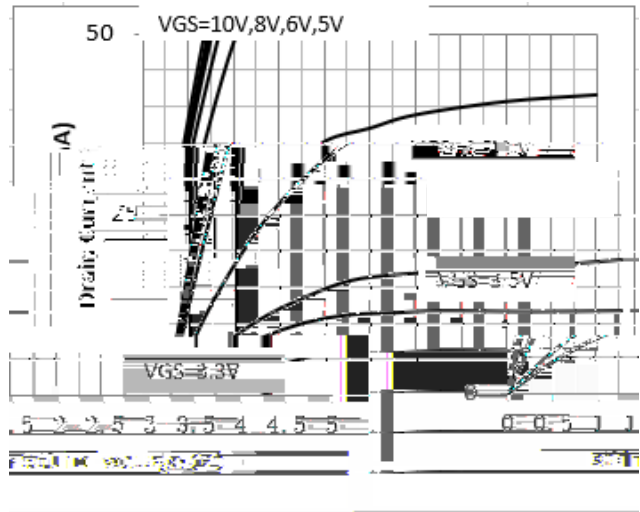


Fig.3 Threshold Voltage V.S Junction Temperature

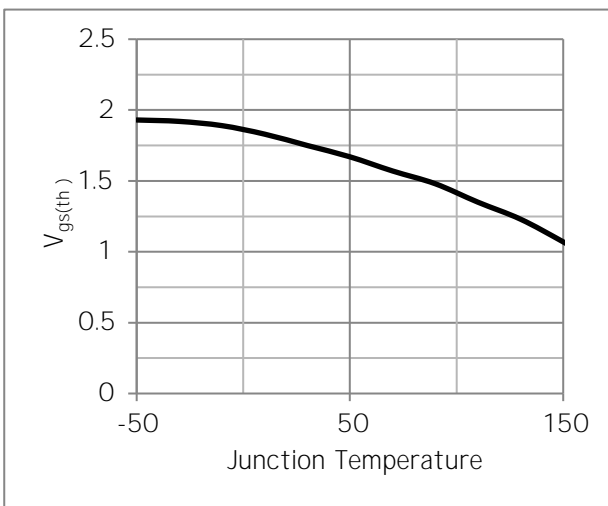


Fig.4 Resistance V.S Drain Current

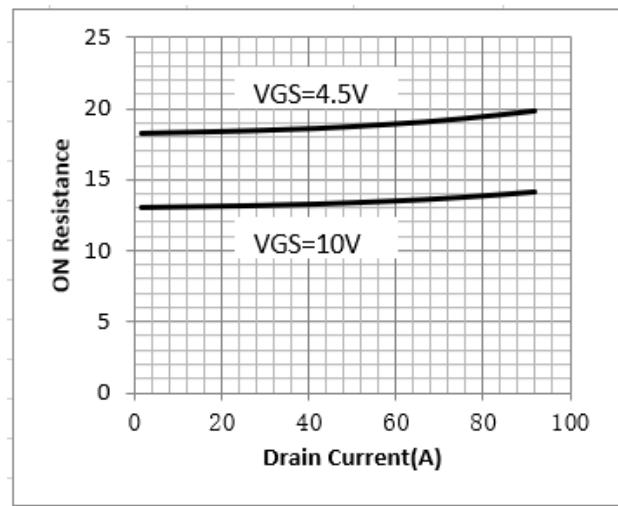


Fig.5 On-Resistance VS Gate Source Voltage

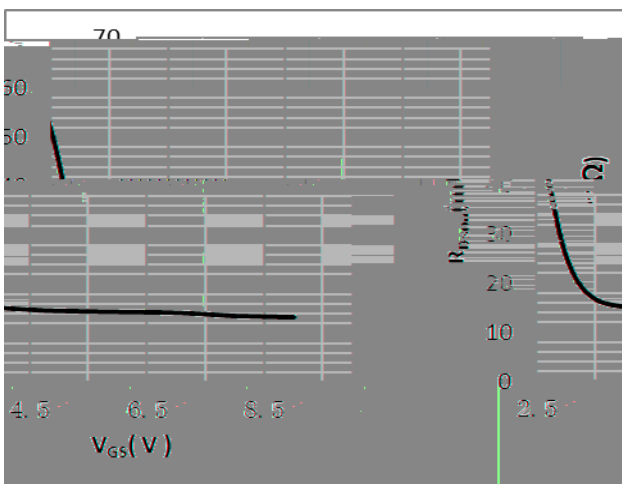
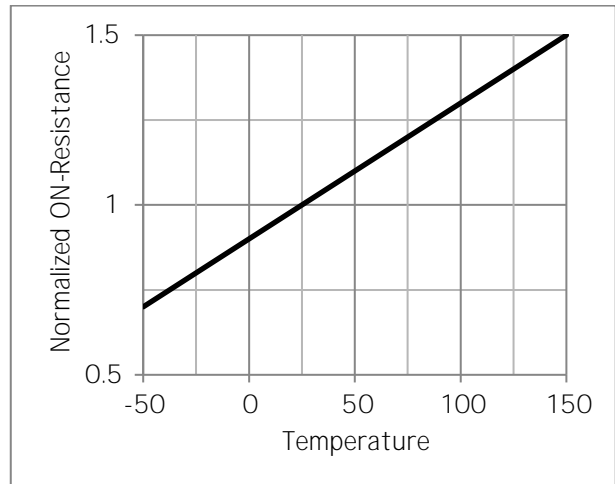


Fig.6 On-Resistance V.S Junction Temperature



**P Channel characteristics curve**

Fig.1 Power Dissipation Derating Curve

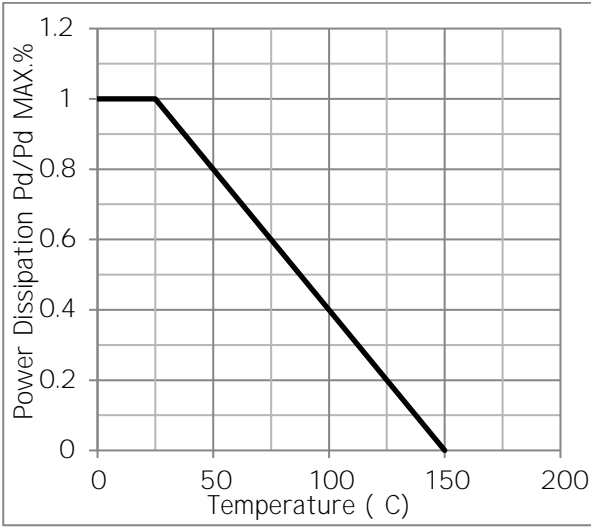


Fig.2 Typical output Characteristics

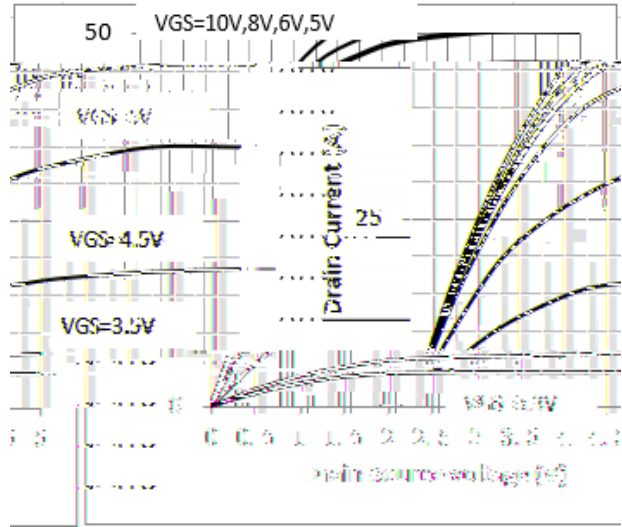


Fig.3 Threshold Voltage V.S Junction Temperature

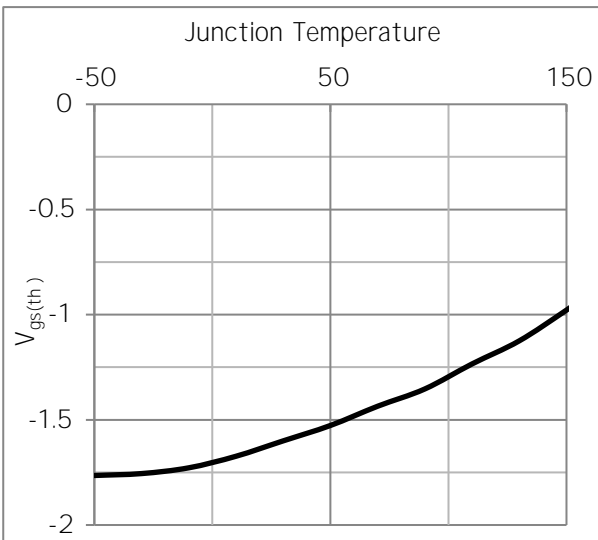


Fig.4 Resistance V.S Drain Current

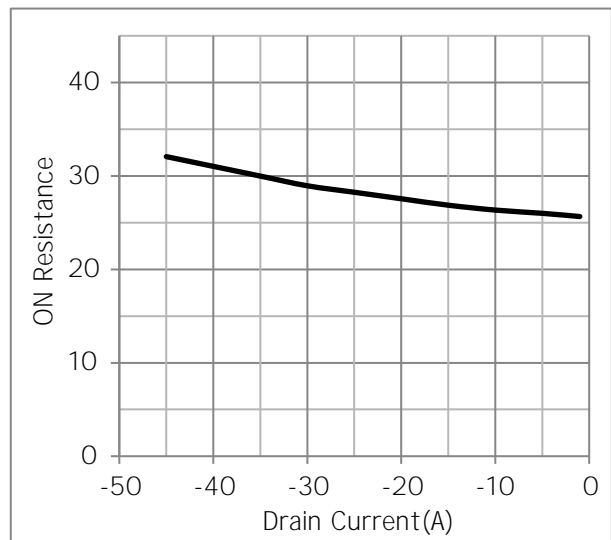


Fig.5 On-Resistance VS Gate Source Voltage

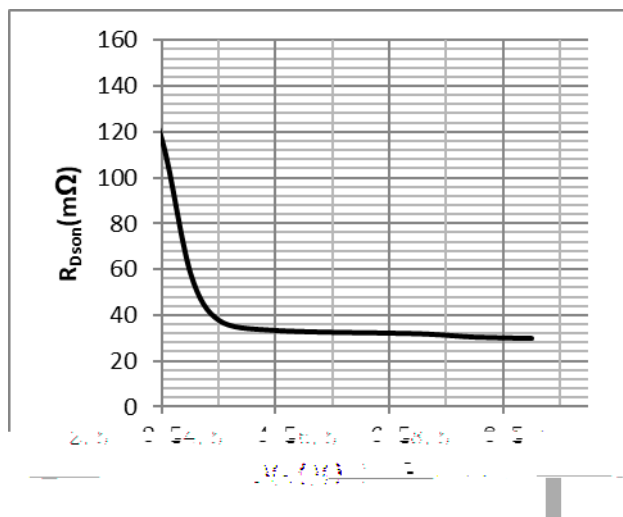
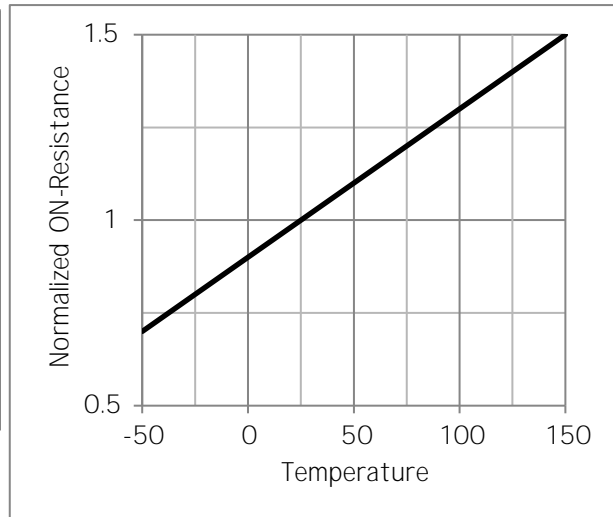


Fig.6 On-Resistance V.S Junction Temperature



Test Circuit

Fig.1 Switching Time Measurement Circuit

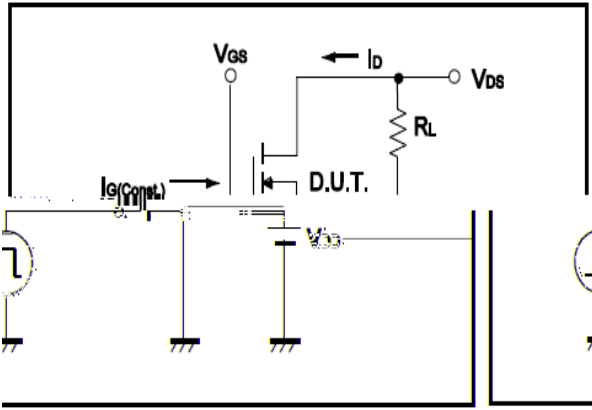


Fig.2 Gate Charge Waveform

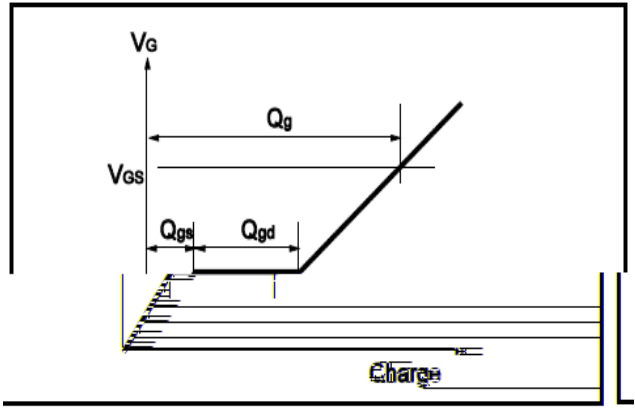


Fig.3 Switching Time Measurement Circuit

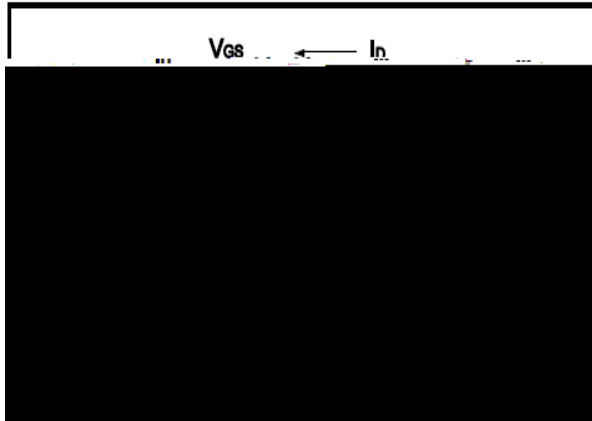


Fig.4 Gate Charge Waveform

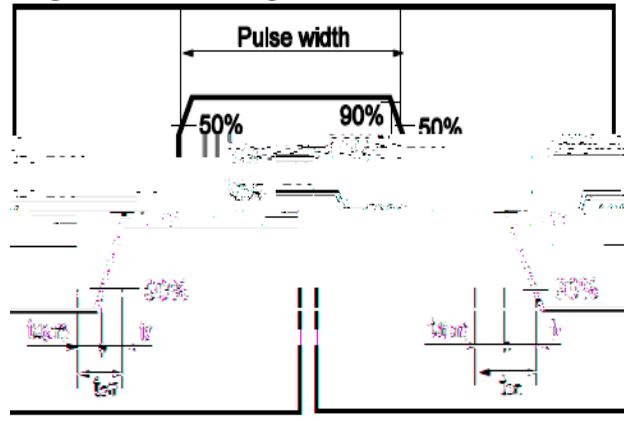


Fig.5 Avalanche Measurement Circuit

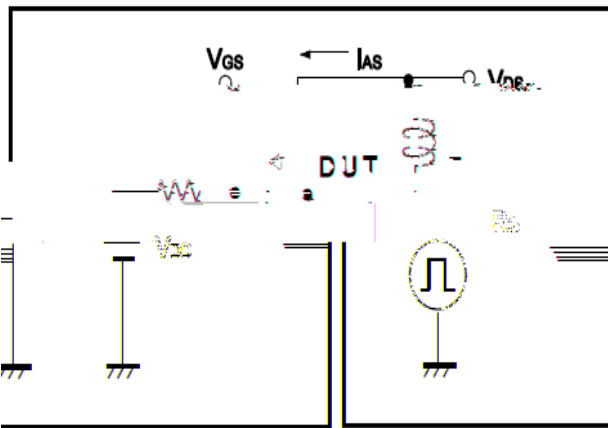


Fig.6 Avalanche Waveform

