

● Feature

50V/0.2A, $R_{DS(ON)} = 3.5 \Omega$ (MAX) @ $V_{GS} = 5V, I_D = 0.2A$
 $R_{DS(ON)} = 10 \Omega$ (MAX) @ $V_{GS} = 2.75V, I_D = 0.2A$

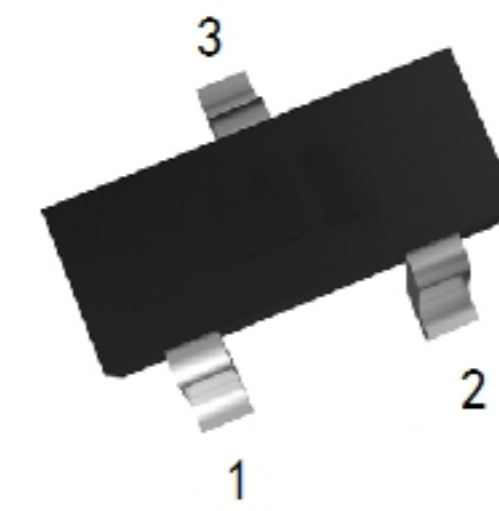
Super High dense cell design for extremely low $R_{DS(ON)}$.

Reliable and Rugged.

Low Threshold Voltage (0.5V—1.5V) Make it Ideal for Low Voltage Applications.

SOT-23 for Surface Mount Package.

SOT-23



1: Gate 2: Source 3: Drain

● Applications

Power Management in DC/DC Converters, Portable and Battery-powered Products.

● Absolute Maximum Ratings

$T_A = 25^\circ C$ Unless Otherwise noted

| Parameter | Symbol | Limit | Units |
|--------------------------|----------|----------|-------|
| Drain-Source Voltage | V_{DS} | 50 | V |
| Gate-Source Voltage | V_{GS} | ± 20 | V |
| Drain Current-Continuous | I_D | 0.2 | A |

● Electrical Characteristics

$T_A = 25^\circ C$ Unless Otherwise noted

| Parameter | Symbol | Test Conditions | Min | Typ. | Max | Units |
|---|--------------|---------------------------------|-----|------|------|----------|
| Off Characteristics | | | | | | |
| Drain to Source Breakdown Voltage | BVDSS | $V_{GS} = 0V, I_D = 250\mu A$ | 50 | - | - | V |
| Zero-Gate Voltage Drain Current | IDSS | $V_{DS} = 50V, V_{GS} = 0V$ | - | - | 0.5 | μA |
| | | $V_{DS} = 25V, V_{GS} = 0V$ | - | - | 0.1 | |
| Gate Body Leakage Current, Forward | IGSSF | $V_{GS} = 20V, V_{DS} = 0V$ | - | - | 100 | nA |
| Gate Body Leakage Current, Reverse | IGSSR | $V_{GS} = -20V, V_{DS} = 0V$ | - | - | -100 | nA |
| On Characteristics | | | | | | |
| Gate Threshold Voltage | $V_{GS(th)}$ | $V_{GS} = V_{DS}, I_D = 1.0 mA$ | 0.5 | - | 1.5 | V |
| Static Drain-source On-Resistance | RDS(ON) | $V_{GS} = 5.0V, I_D = 0.2A$ | - | - | 3.5 | Ω |
| | | $V_{GS} = 2.75V, I_D = 0.2A$ | - | - | 10 | Ω |
| Drain-Source Diode Characteristics and Maximum Ratings | | | | | | |
| Drain-Source Diode Forward Voltage | VSD | $V_{GS} = 0V, I_S = 0.2A$ | | | 2.5 | V |

Typical Characteristics

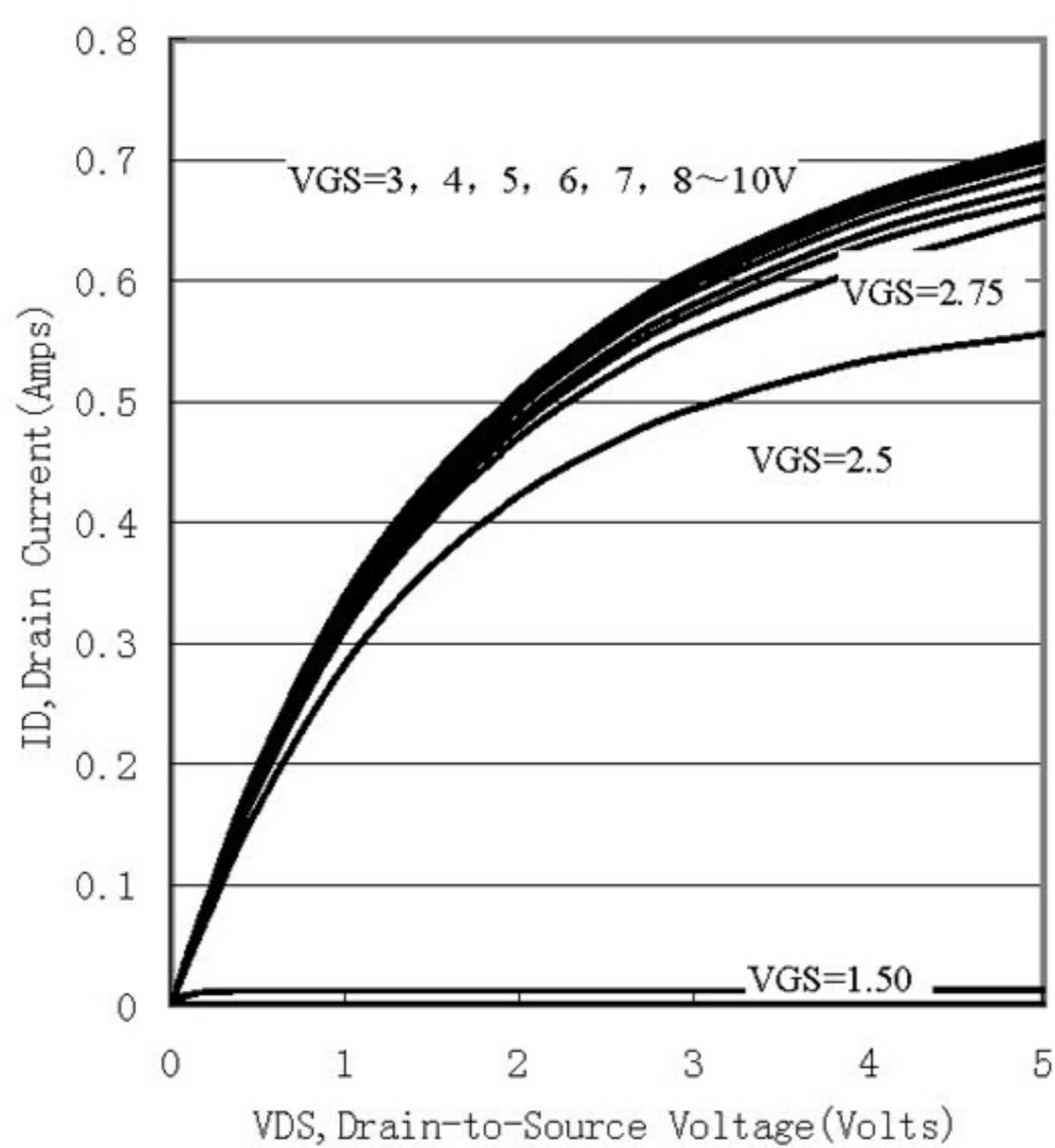


Figure 1. Output Characteristics

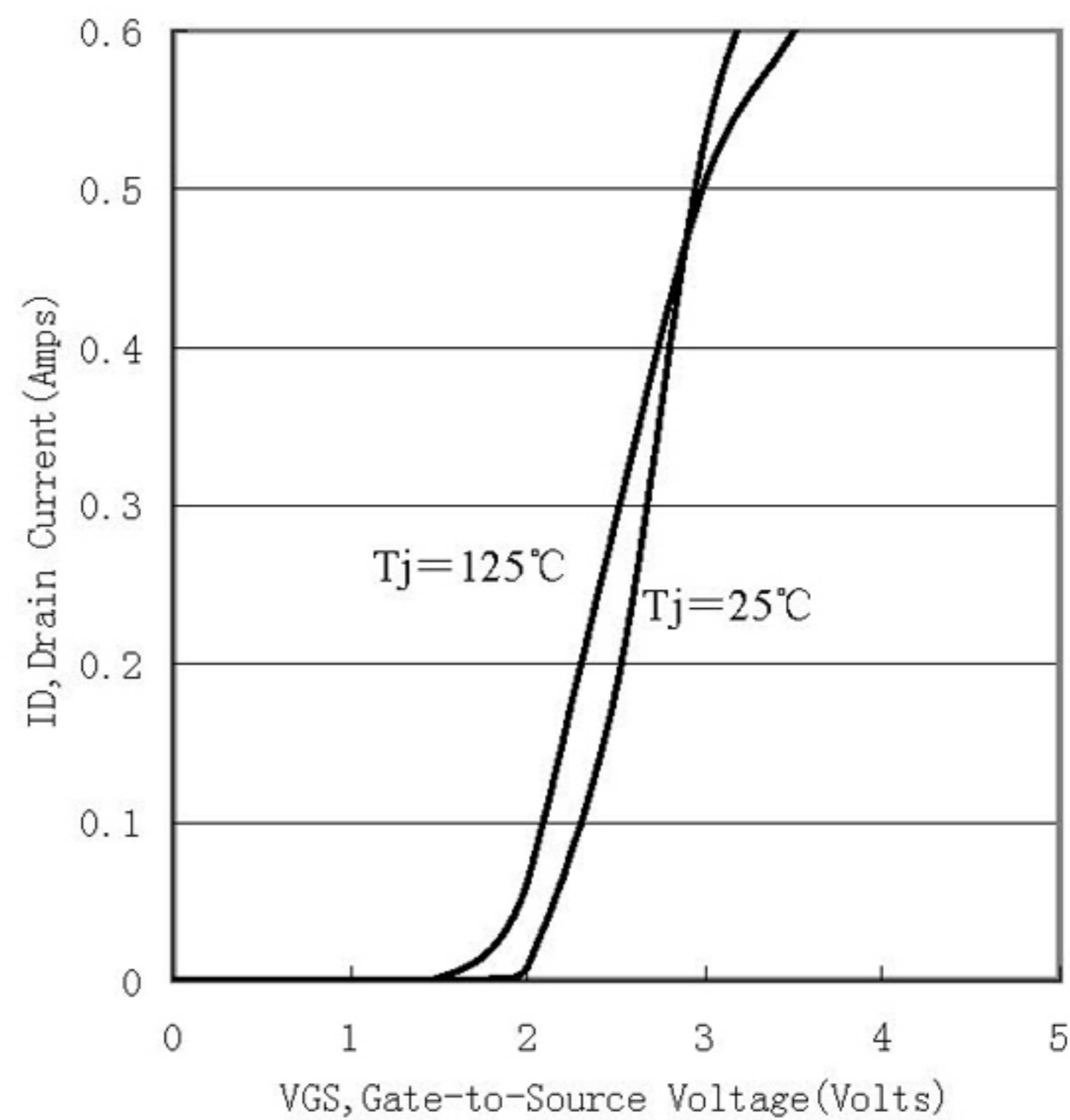


Figure 2. Transfer Characteristics

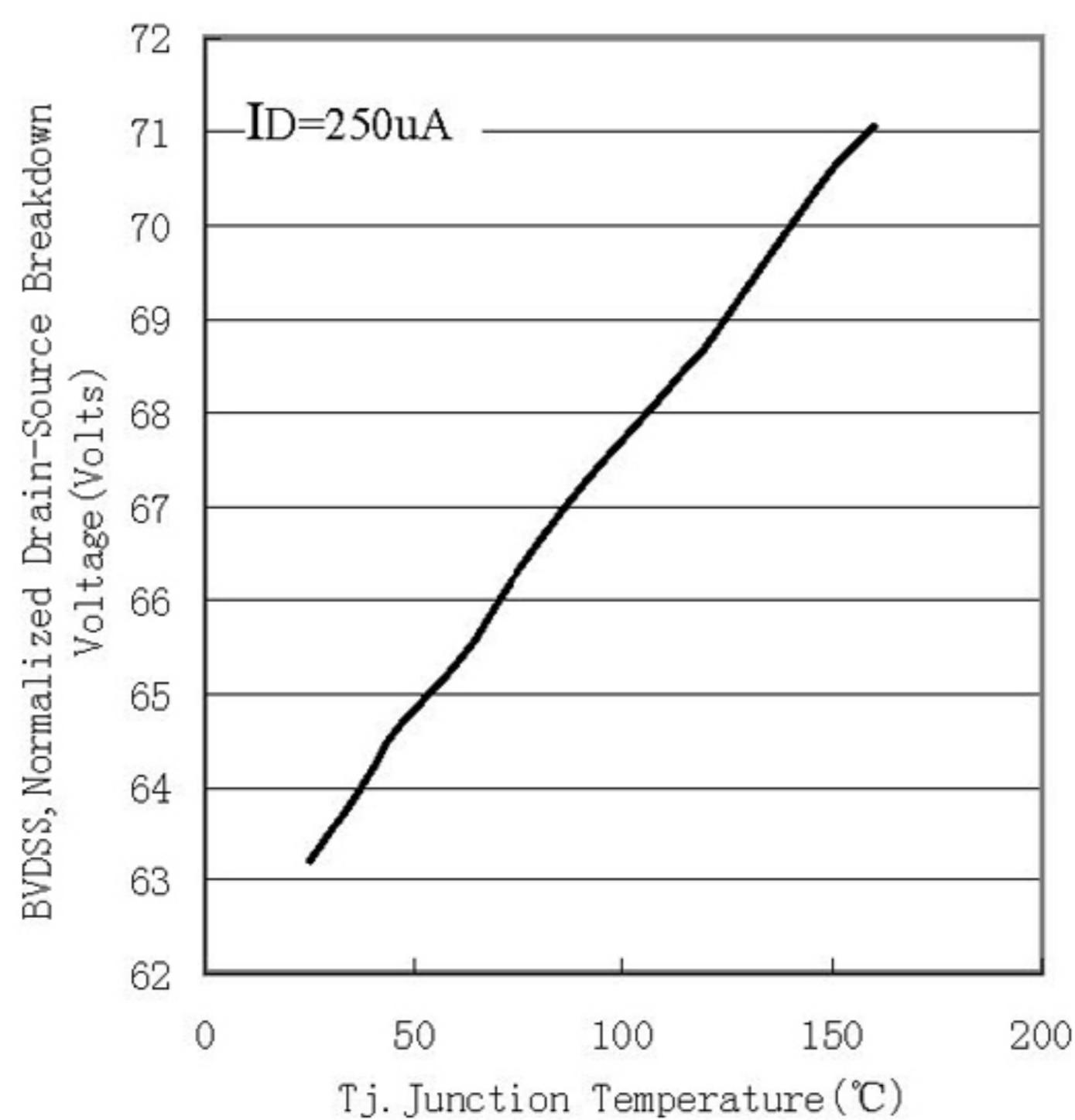


Figure 3. Breakdown Voltage Variation with Temperature

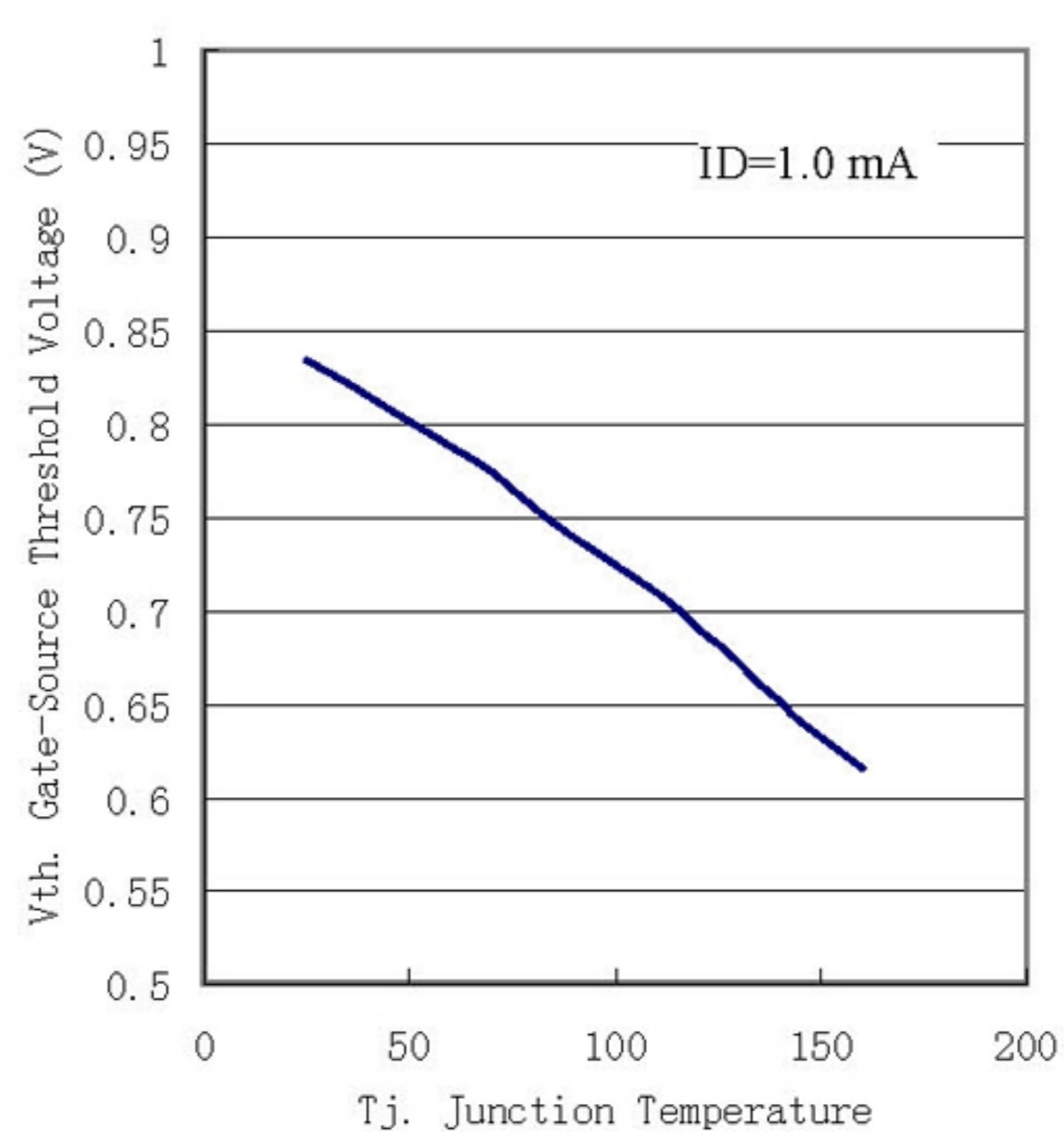


Figure 4. Gate Threshold Variation with Temperature

Typical Characteristics

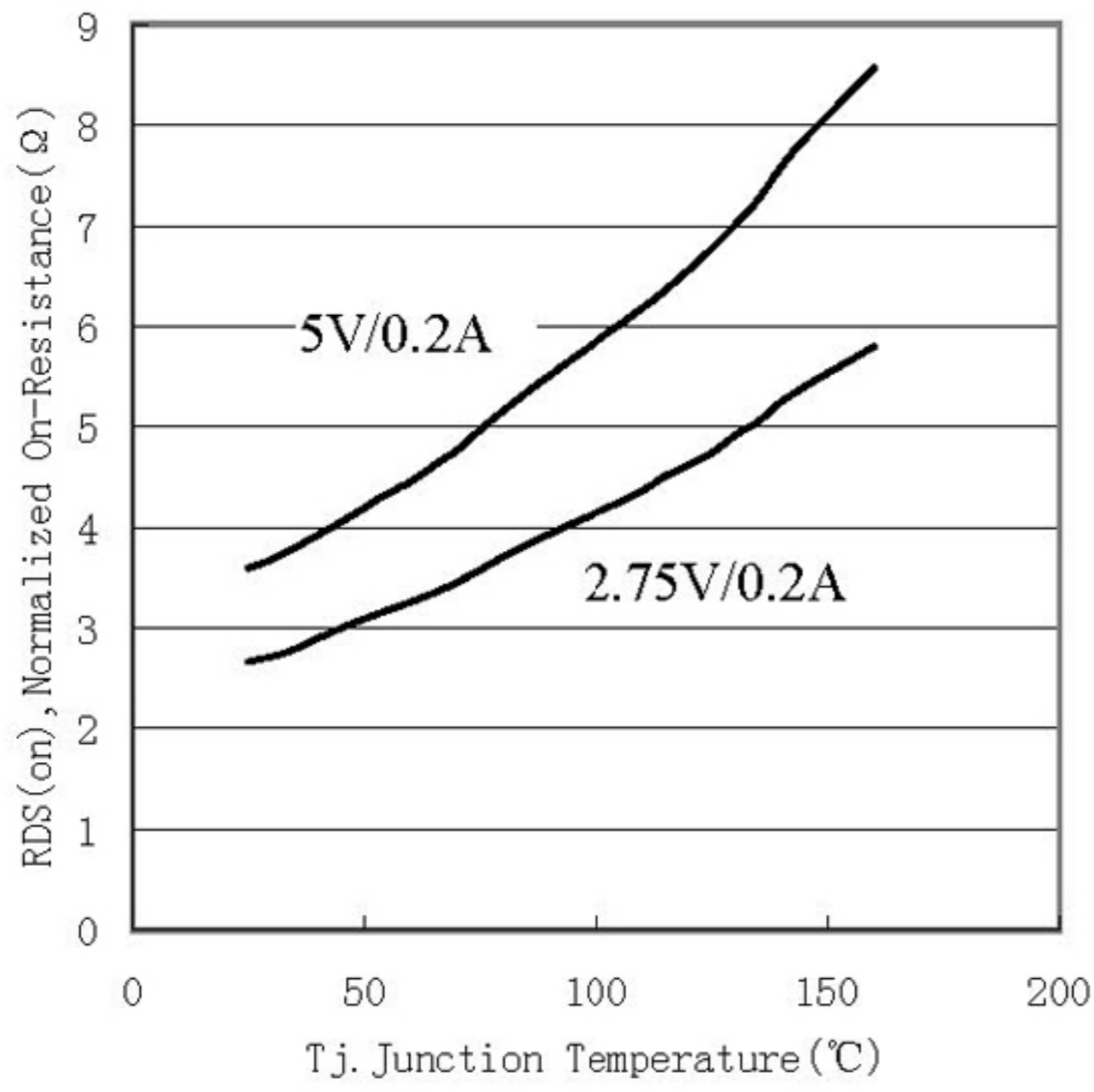


Figure 5. On-Resistance Variation with Temperature

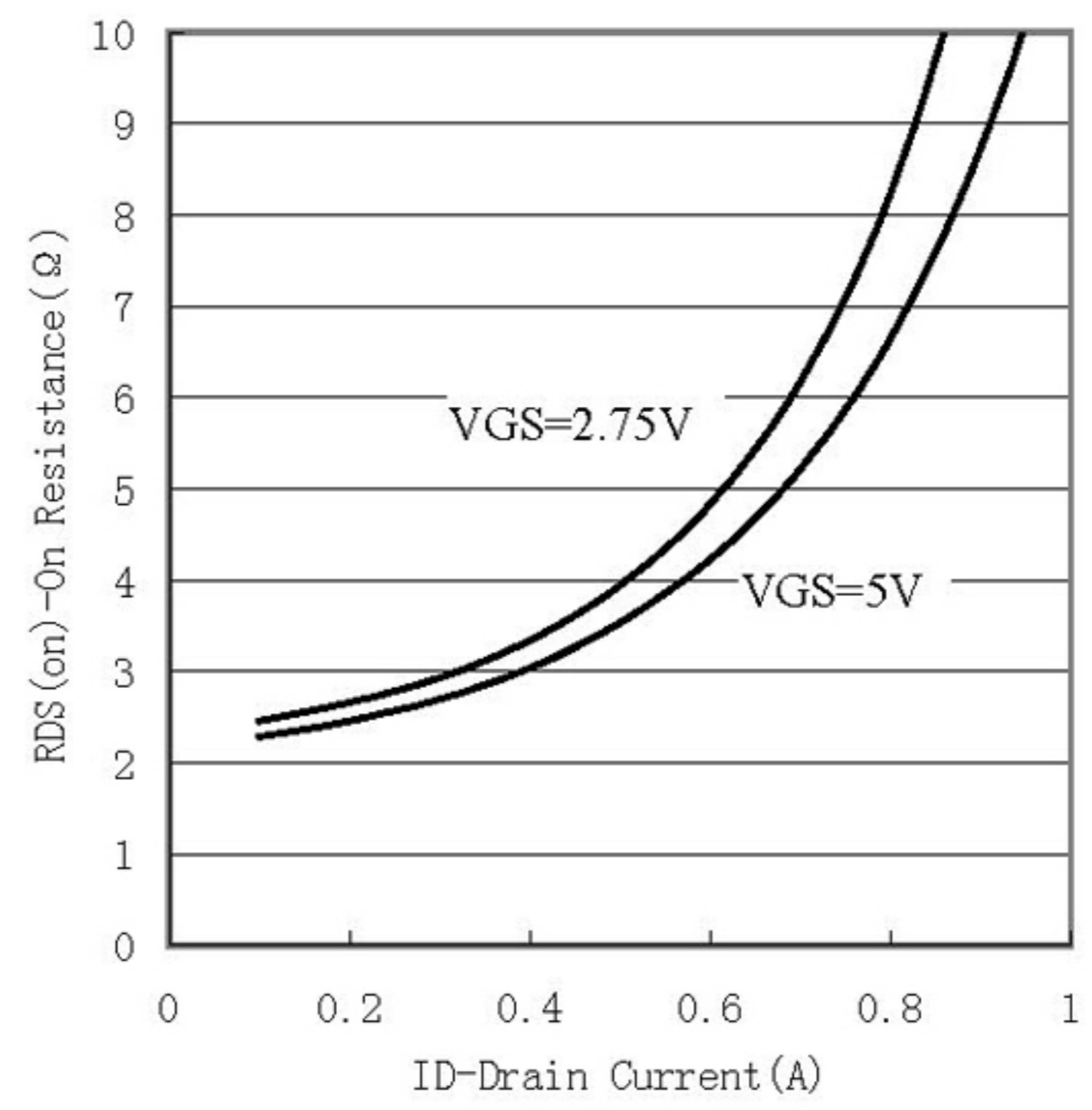


Figure 6. On-Resistance vs. Drain Current

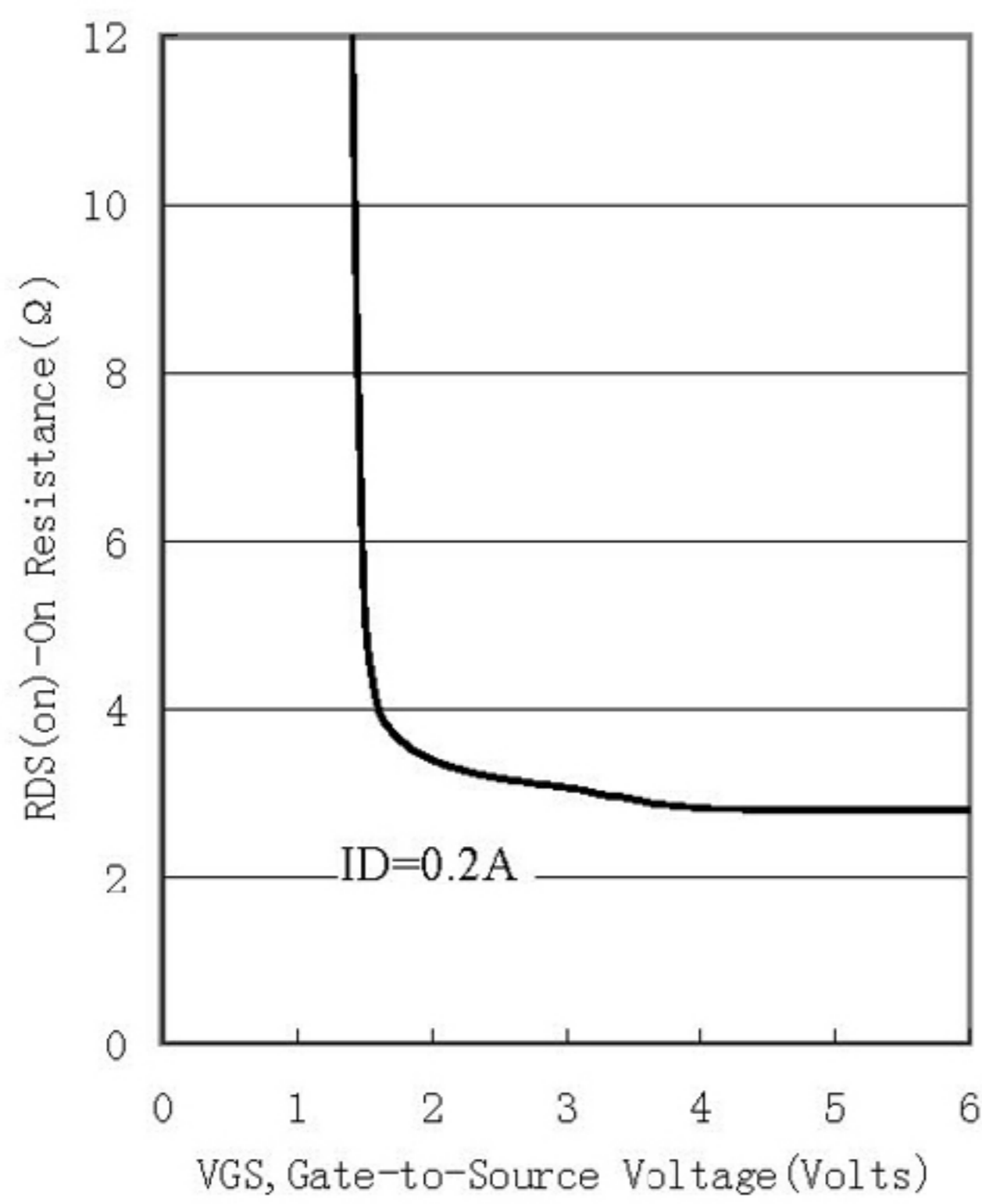


Figure 7. On-Resistance vs. Gate-to-Source Voltage

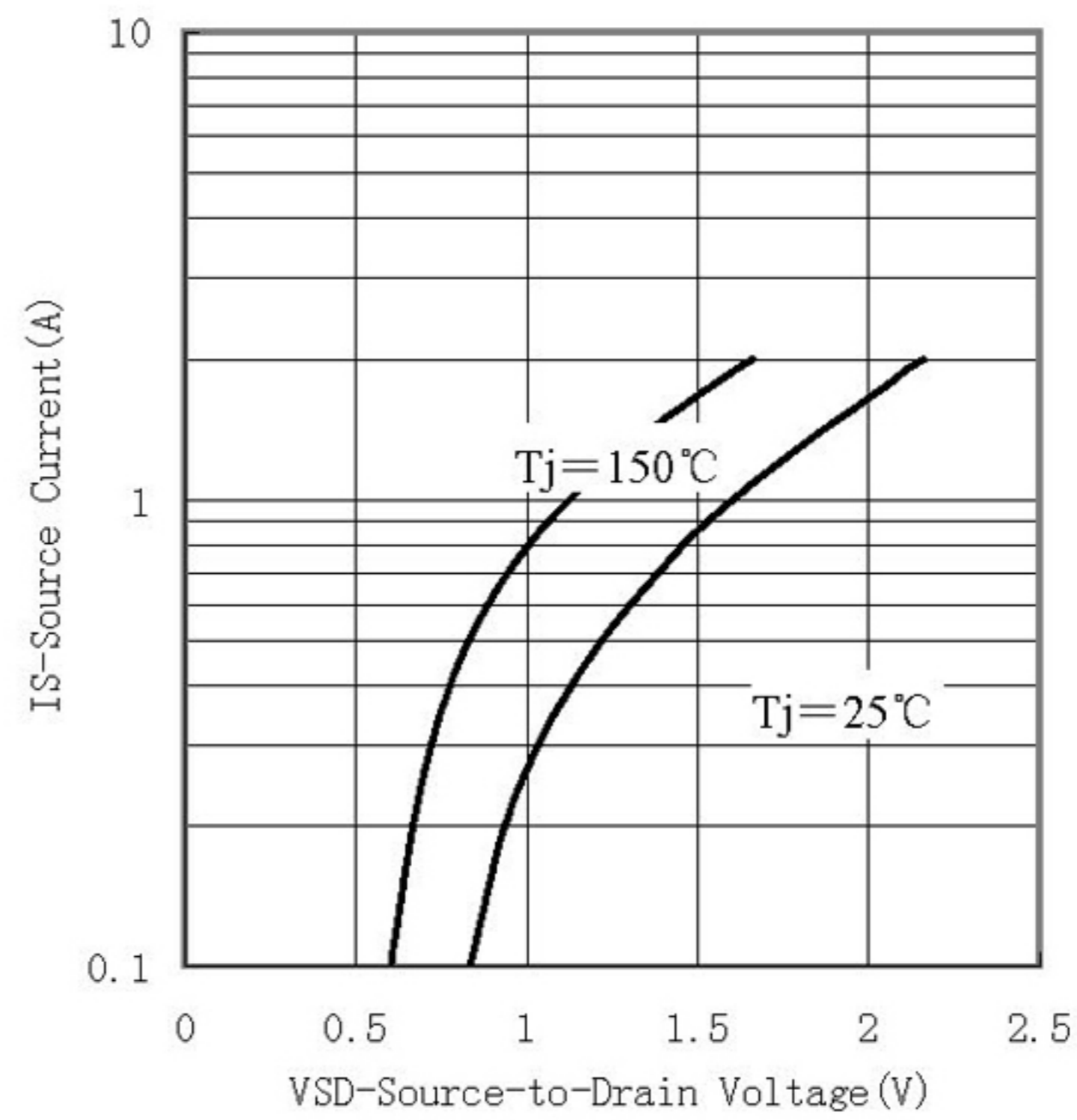


Figure 8. Source-Drain Diode Forward Voltage

单击下面可查看定价，库存，交付和生命周期等信息

[>>SHIKUES\(时科\)](#)