

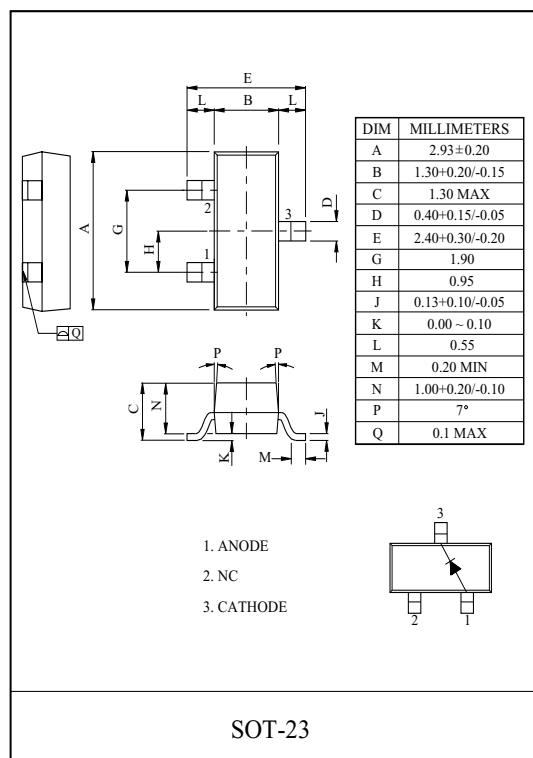
ULTRA HIGH SPEED SWITCHING APPLICATION.

#### FEATURES

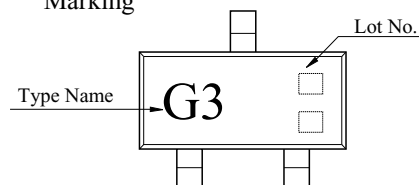
- Small Package : SOT-23.
- Low Forward Voltag :  $V_F=0.9V$ (Typ.).
- Fast Reverse Recovery Time :  $t_{rr}=1.6ns$ (Typ.).
- Small Total Capacitance :  $C_T=0.9pF$ (Typ.).

#### MAXIMUM RATING (Ta=25 )

| CHARACTERISTIC                 | SYMBOL    | RATING  | UNIT |
|--------------------------------|-----------|---------|------|
| Maximum (Peak) Reverse Voltage | $V_{RM}$  | 85      | V    |
| Reverse Voltage                | $V_R$     | 80      | V    |
| Maximum (Peak) Forward Current | $I_{FM}$  | 300     | mA   |
| Average Forward Current        | $I_O$     | 100     | mA   |
| Surge Current (10ms)           | $I_{FSM}$ | 2       | A    |
| Power Dissipation              | $P_D$     | 150     | mW   |
| Junction Temperature           | $T_j$     | 150     |      |
| Storage Temperature Range      | $T_{stg}$ | -55 150 |      |



#### Marking



#### ELECTRICAL CHARACTERISTICS (Ta=25 )

| CHARACTERISTIC        | SYMBOL     | TEST CONDITION  | MIN. | TYP. | MAX. | UNIT    |
|-----------------------|------------|-----------------|------|------|------|---------|
| Forward Voltage       | $V_{F(1)}$ | $I_F=1mA$       | -    | 0.60 | -    | V       |
|                       | $V_{F(2)}$ | $I_F=10mA$      | -    | 0.72 | -    |         |
|                       | $V_{F(3)}$ | $I_F=100mA$     | -    | 0.90 | 1.20 |         |
| Reverse Current       | $I_R$      | $V_R=80V$       | -    | -    | 0.5  | $\mu A$ |
| Total Capacitance     | $C_T$      | $V_R=0, f=1MHz$ | -    | 0.9  | 3.0  | pF      |
| Reverse Recovery Time | $t_{rr}$   | $I_F=10mA$      | -    | 1.6  | 4.0  | nS      |

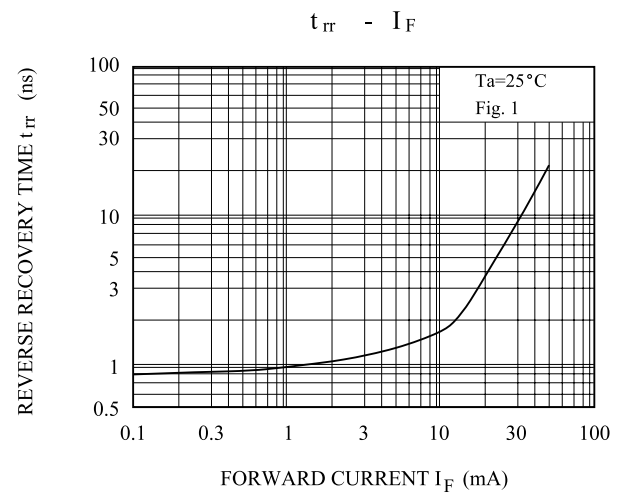
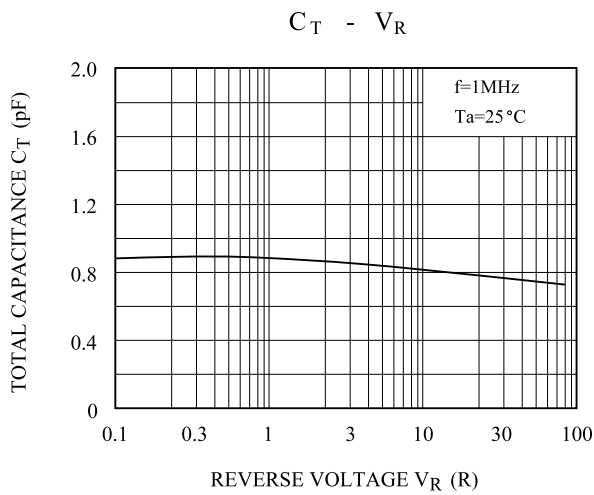
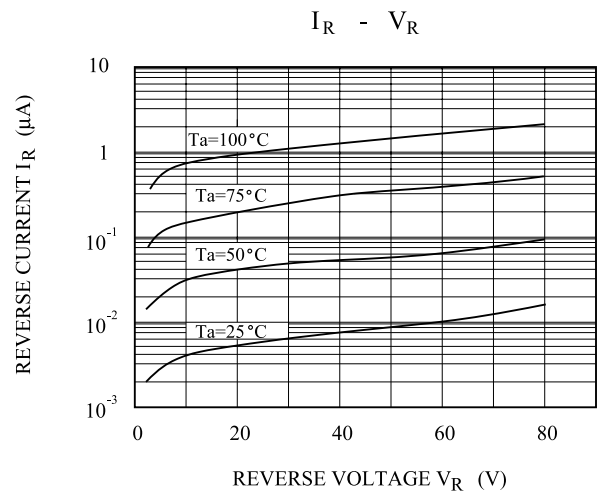
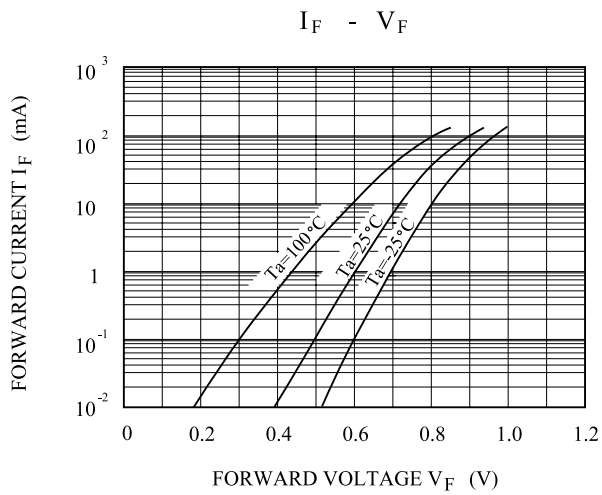


Fig. 1. REVERSE RECOVERY TIME( $t_{rr}$ ) TEST CIRCUIT

