

ULTRA HIGH SPEED SWITCHING APPLICATION.

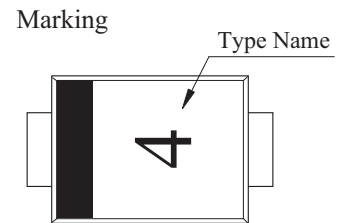
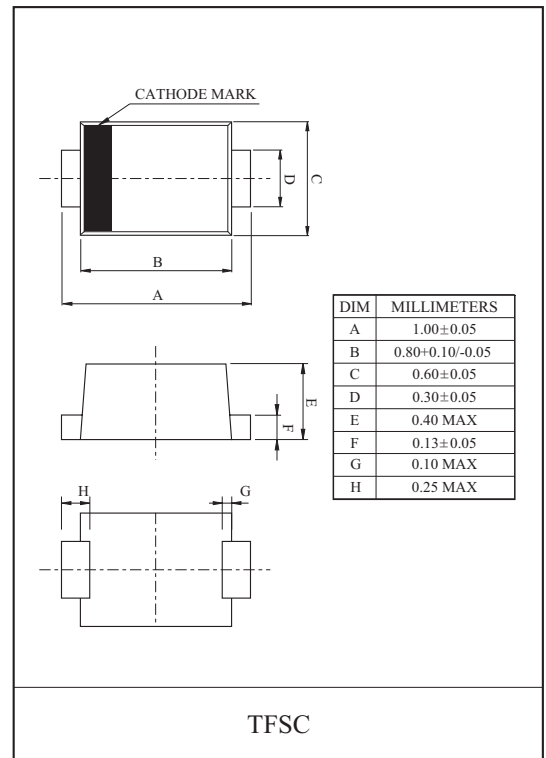
FEATURES

- Small package : TFSC.
- Low forward voltage.
- Fast reverse recovery time.
- Small total capacitance.
- Suffix U : Qualified to AEC-Q101.
ex) KDS160F-RTK/HU

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^* | 100 | mW |
| Junction Temperature | T_j | 150 | |
| Storage Temperature Range | T_{stg} | -55 150 | |

* : Mounted on a glass epoxy circuit board of 20 × 20mm,
pad dimension of 4 × 4mm.



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 | μA |
| Total Capacitance | C_T | $V_R=0V, f=1MHz$ | - | 0.9 | 3.0 | pF |
| Reverse Recovery Time | t_{rr} | $I_F=10mA$ | - | 1.6 | 4.0 | nS |

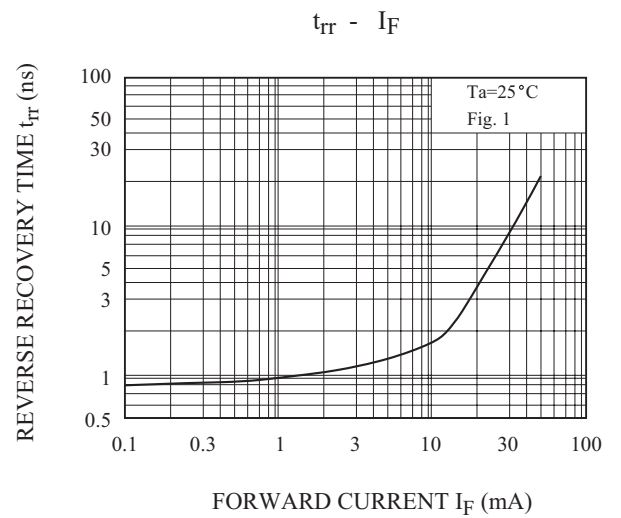
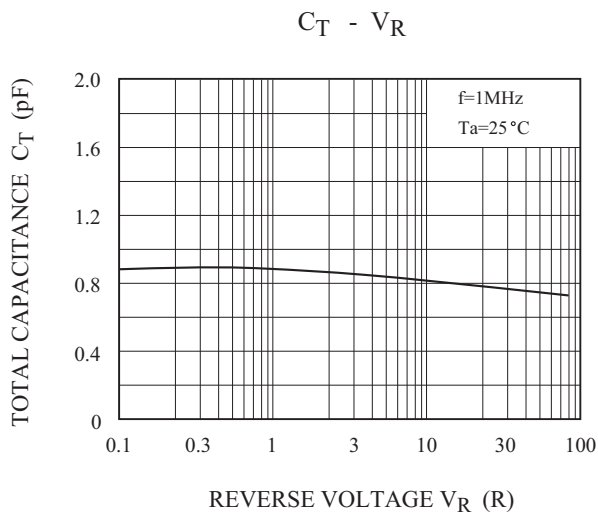
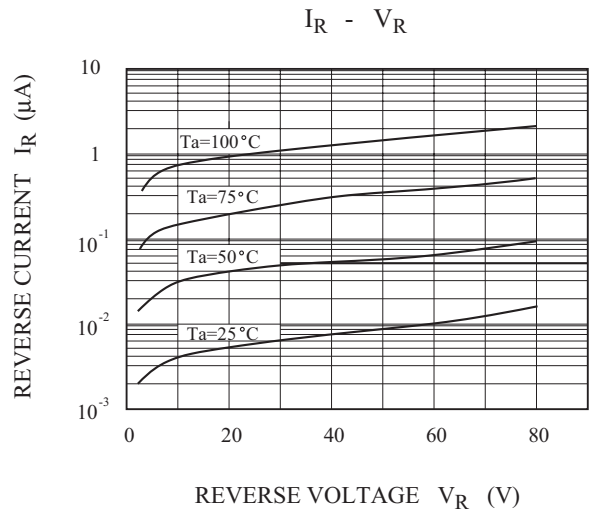
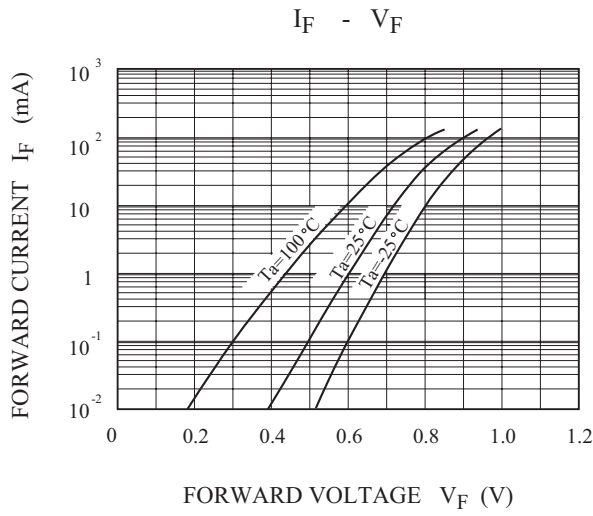


Fig. 1. REVERSE RECOVERY TIME (t_{rr}) TEST CIRCUIT

