

ULTRA HIGH SPEED SWITCHING APPLICATION.

#### FEATURES

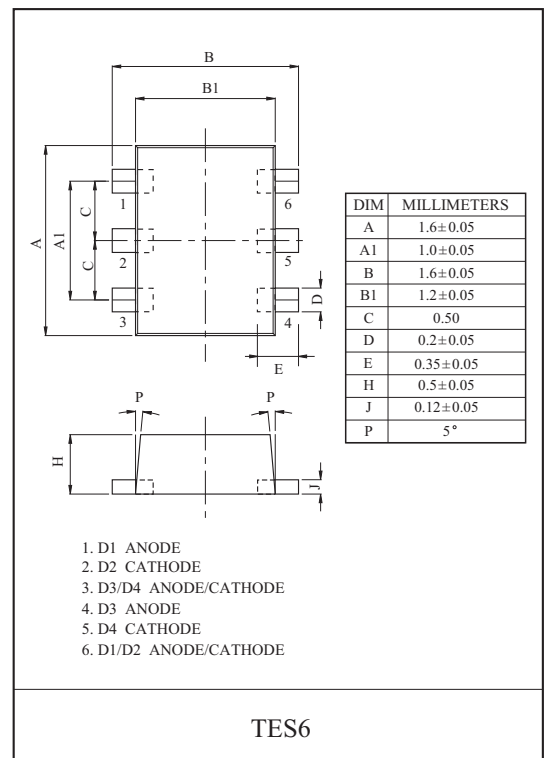
- Low Forward Voltage
- Fast Reverse Recovery Time
- Small Total Capacitance
- Ultra- Small Surface Mount Package
- Suffix U : Qualified to AEC-Q101.  
ex) KDS127E-RTK/HU

#### MAXIMUM RATING (Ta=25 °C)

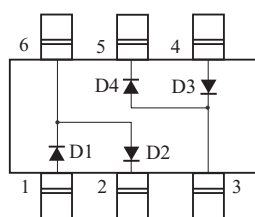
| CHARACTERISTIC                 | SYMBOL    | RATING    | UNIT |
|--------------------------------|-----------|-----------|------|
| Maximum (Peak) Reverse Voltage | $V_{RM}$  | 80        | V    |
| Reverse Voltage                | $V_R$     | 80        | V    |
| Maximum (Peak) Forward Current | $I_{FM}$  | 300 *     | mA   |
| Average Forward Current        | $I_O$     | 100 *     | mA   |
| Surge Current (10ms)           | $I_{FSM}$ | 2 *       | A    |
| Power Dissipation              | $P_D$     | 200**     | mW   |
| Junction Temperature           | $T_j$     | 150       |      |
| Storage Temperature Range      | $T_{stg}$ | -55 ~ 150 |      |

\* Where D1, D2, D3, D4 are used independently or simultaneously,  
the Maximum Ratings per diode are 50% of those of the single diode.

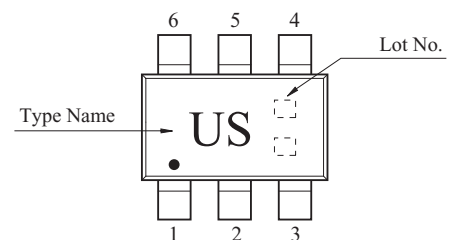
\*\* Total Rating



#### EQUIVALENT CIRCUIT (TOP VIEW)



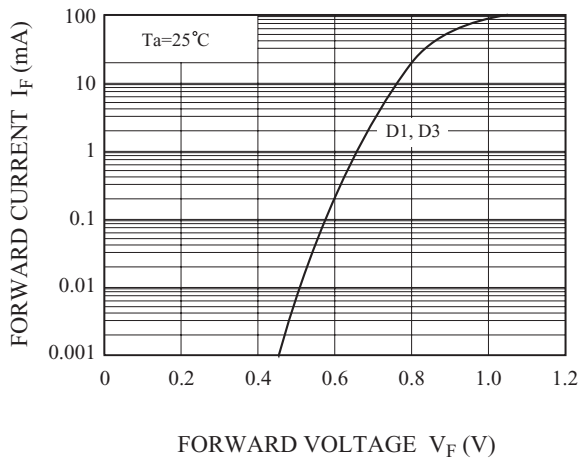
#### Marking



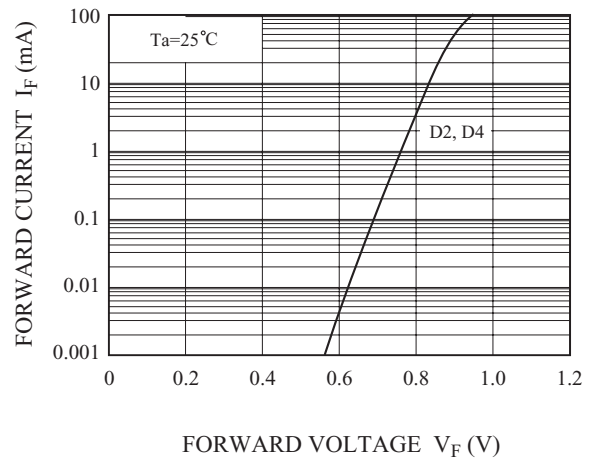
#### ELECTRICAL CHARACTERISTICS (Ta=25 °C)

| CHARACTERISTIC    | SYMBOL | TEST CONDITION   | MIN. | TYP. | MAX. | UNIT |
|-------------------|--------|------------------|------|------|------|------|
| Forward Voltage   | $V_F$  | $I_F=100mA$      | -    | -    | 1.2  | V    |
| Reverse Current   | $I_R$  | $V_R=80V$        | -    | -    | 0.1  | μA   |
| Total Capacitance | $C_T$  | $V_R=6V, f=1MHz$ | -    | -    | 3.5  | pF   |

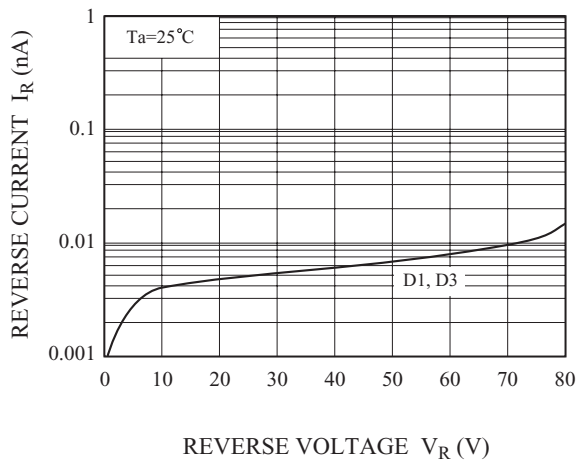
$I_F - V_F$



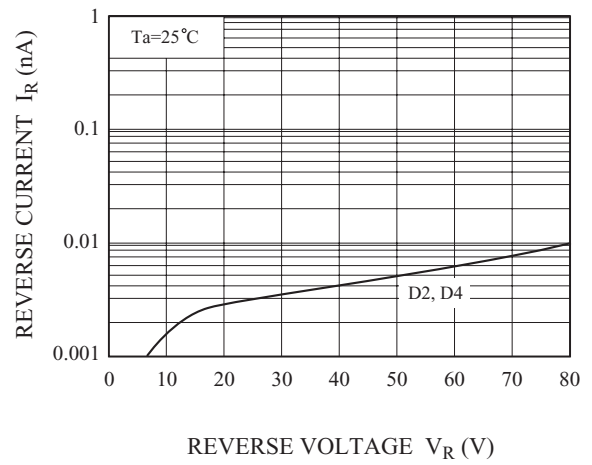
$I_F - V_F$



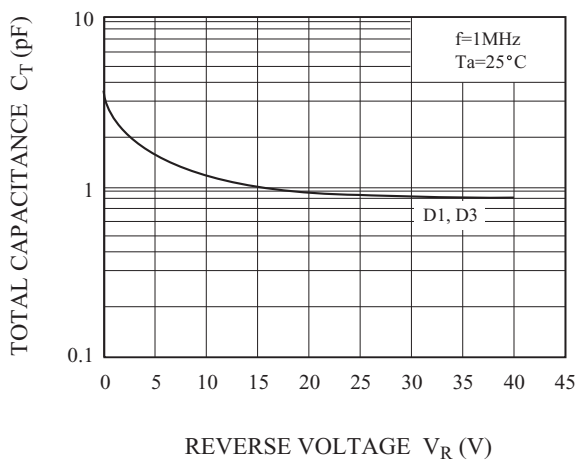
$I_R - V_R$



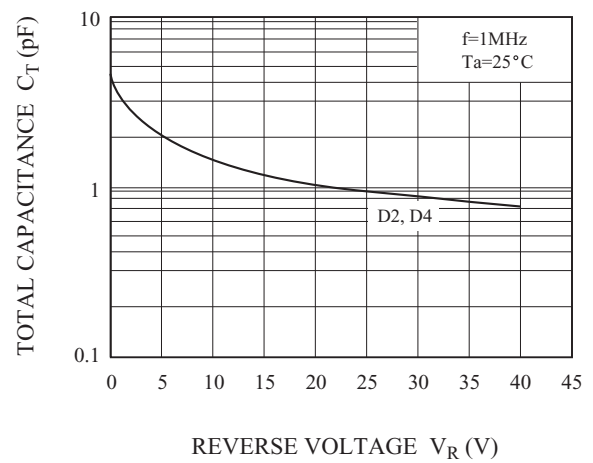
$I_R - V_R$



$C_T - V_R$



$C_T - V_R$



# KDS127E

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P - Ta

