## SWITCHING DIODE

VOLTAGE RANGE: 35/75 VOLTS
CURRENT: 100mA

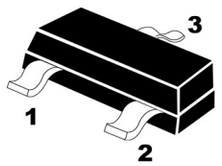
### FEATURES

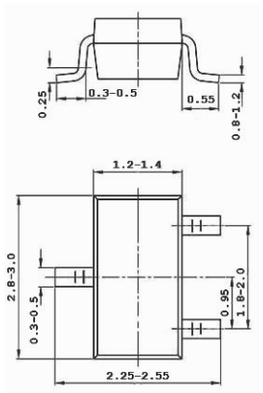
- High speed switching: trr=3.0ns(max)
- Low capacitance: $C_T$=1.1 pF(typ.)

**MARKING: 1S2837: A5**
**1S2838: A61**

### SOT-23

1. ANODE
2. ANODE
3. CATHODE




Unit:mm

## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25℃ ambient temperature unless otherwise specified.

### MAXIMUM RATINGS

| Parameters | Symbols | Limits | | UNITS |
|---|---|---|---|---|
| | | 1S2837 | 1S2838 | |
| Non-Repetitive Peak Reverse Voltage | $V_{RM}$ | 35 | 75 | V |
| DC Blocking Voltage | $V_R$ | 30 | 50 | V |
| Average Rectified Output Current | $I_O$ | 100 | | mA |
| Power Dissipation | $P_d$ | 150 | | mW |
| Junction Temperature | $T_J$ | 125 | | ℃ |
| Storage Temperature Range | $T_{STG}$ | -55~+125 | | ℃ |

### ELECTRICAL CHARACTERISTICS

| Parameters | Symbols | Test conditions | Min. | Typ. | Max. | UNITS |
|---|---|---|---|---|---|---|
| Forward Voltage | $V_{F1}$ | $I_F$=10mA | | 0.67 | 1.0 | V |
| | $V_{F2}$ | $I_F$=50mA | | 0.75 | 1.1 | V |
| | $V_{F3}$ | $I_F$=100mA | | 0.85 | 1.2 | V |
| Reverse Current:1S2837 | $I_R$ | $V_R$=30V | | | 0.1 | μA |
| 1S2838 | $I_R$ | $V_R$=50V | | | 0.1 | μA |
| Reverse Recovery Time | $t_{rr}$ | $I_F$=10mA, $V_R$=6V, $R_L$=100Ω, $I_{rr}$=0.1*$I_R$ | | | 3.0 | ns |
| Capacitance Between Terminals | $C_T$ | $V_R$ =0V, f=1MHz | | 1.1 | 4.0 | pF |