

SWITCHING DIODE

VOLTAGE RANGE: 35/75 VOLTS

CURRENT: 100mA

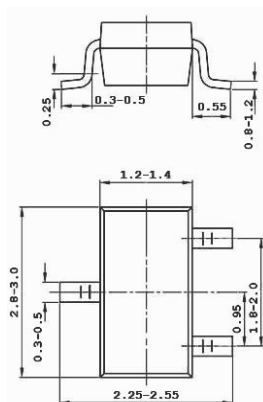
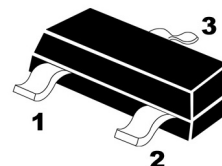
FEATURES

- High speed switching: $t_{rr}=3.0ns(max)$
- Low capacitance: $C_T=1.1\text{ pF}(typ.)$

MARKING: 1S2837: A5
1S2838: A61

SOT-23

1. ANODE
2. ANODE
3. CATHODE



Unit:mm

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C 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		°C
Storage Temperature Range	T_{STG}	-55~+125		°C

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}	$I_F=10mA, V_R=6V,$ $R_L=100\Omega, I_{rr}=0.1 \cdot I_R$			3.0	ns
Capacitance Between Terminals	C_T	$V_R=0V, f=1MHz$		1.1	4.0	pF