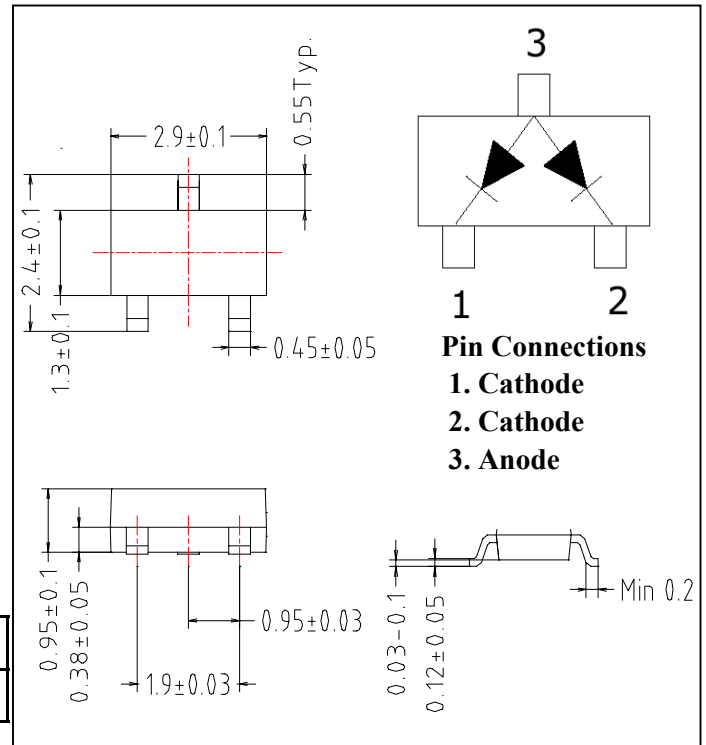


### 1. Features

- Low Forward Voltage:  
 $V_F=0.9V(\text{Typ.})$
- Fast Reverse Recovery Time:  
 $t_{rr}=1.6ns(\text{Typ.})$
- Small Total Capacitance:  
 $C_T=2.2pF(\text{Typ.})$
- Ultra High Speed

### 2. Ordering Information

Device	Marking	Package
EDS2836	ES1	SOT-23



SOT-23 Package Outline Dimension

### 3. Maximum ratings ( $T_a=25^\circ\text{C}$ )

Characteristic	Symbol	Ratings	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	$^\circ\text{C}$
Storage temperature	$T_{stg}$	-55 ~ 150	$^\circ\text{C}$

\* : Unit ratings. Total rating = Unit rating  $\times 1.5$

### 4. Electrical Characteristics ( $T_a=25^\circ\text{C}$ )

Characteristic	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Forward voltage	$V_{F(1)}$	$I_F=1\text{mA}$	-	0.6	-	V
	$V_{F(2)}$	$I_F=10\text{mA}$	-	0.7	-	
	$V_{F(3)}$	$I_F=100\text{mA}$	-	0.9	1.2	
Reverse current	$I_R$	$V_R=80\text{V}$	-	-	0.5	$\mu\text{A}$
Total capacitance	$C_T$	$V_R=0, f=1\text{MHz}$	-	2.2	4.0	pF
Reverse recovery time	$t_{rr}$	$I_F=10\text{mA}$	-	1.6	4.0	ns

## 5. Electrical Characteristics Curves

Fig 1.  $I_F-V_F$

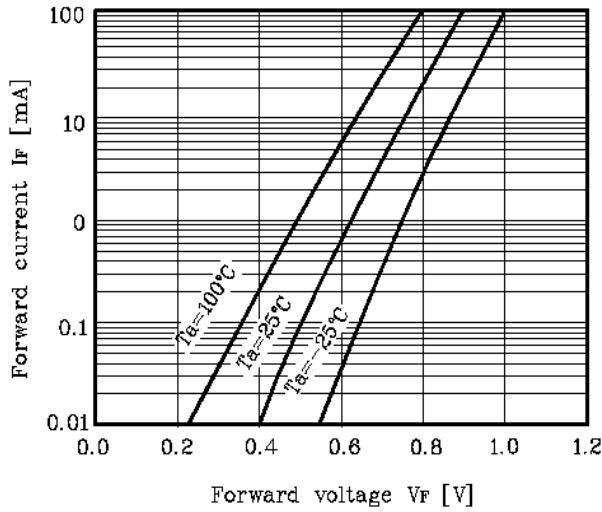


Fig 2.  $I_R-V_R$

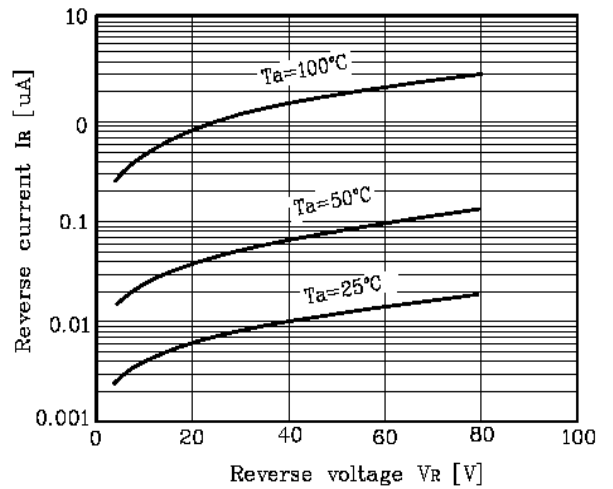


Fig 3.  $C_T-V_R$

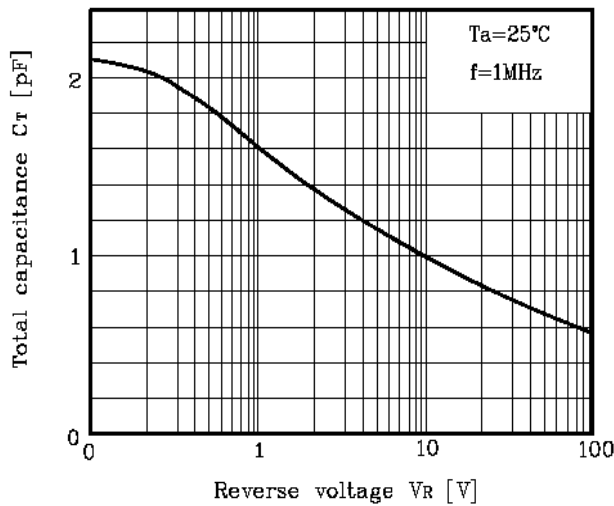


Fig 4.  $t_{rr}-I_F$

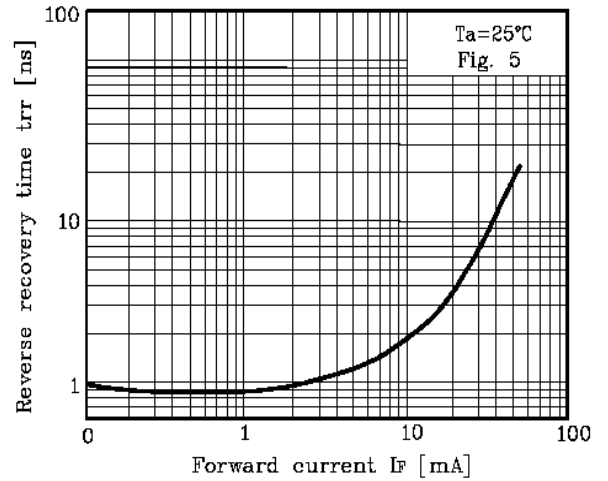


Fig. 5 Reverse Recovery Time Test Circuit

