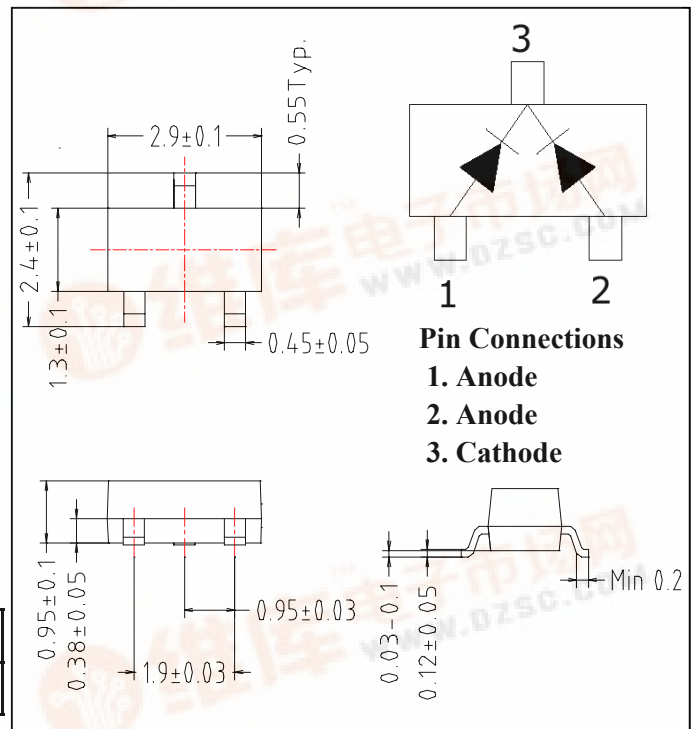


TECHNICAL DATA

EDS2838 Switching Diode

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



SOT-23 Package Outline Dimension

2. Ordering Information

Device	Marking	Package
EDS2838	ES4	SOT-23

3. Maximum ratings (Ta=25°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	°C
Storage temperature	T_{stg}	-55 ~ 150	°C

* : Unit ratings. Total rating = Unit rating ×1.5

4. Electrical Characteristics (Ta=25°C)

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

5. Electrical Characteristics Curves

Fig 1. I_F-V_F

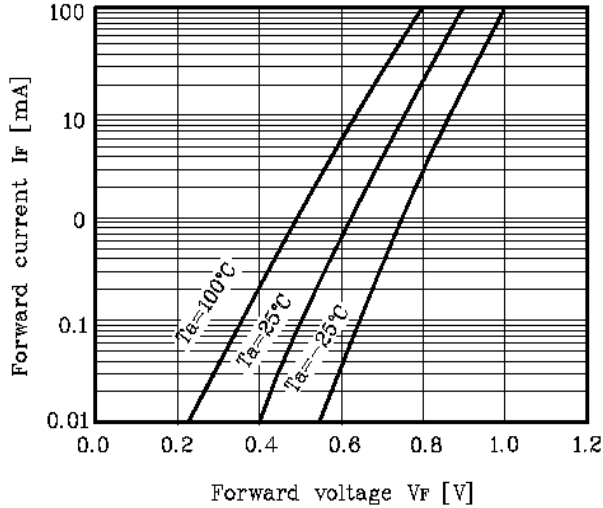


Fig 2. I_R-V_R

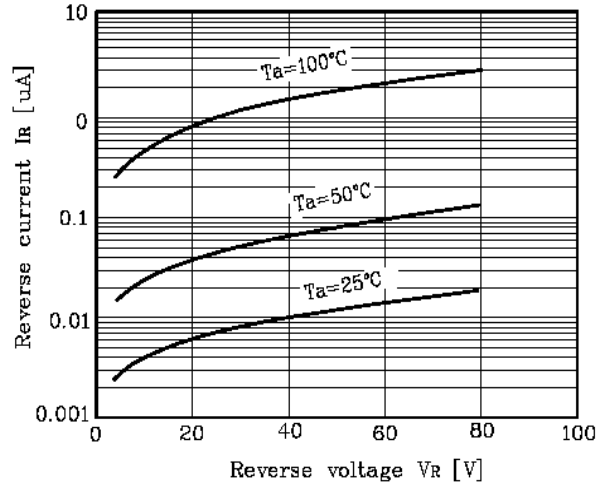


Fig 3. C_T-V_R

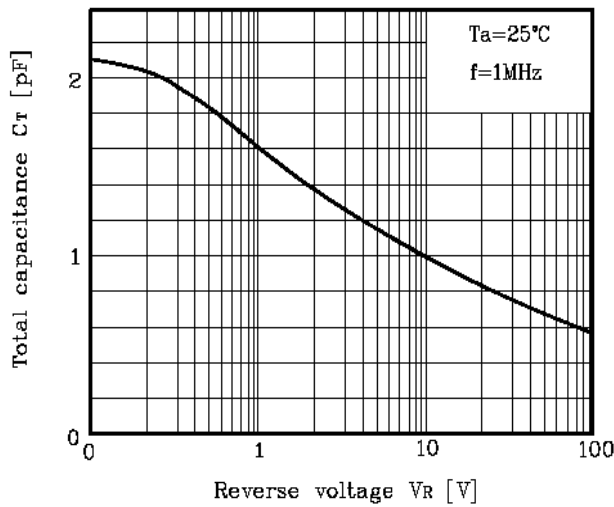


Fig 4. $t_{rr}-I_F$

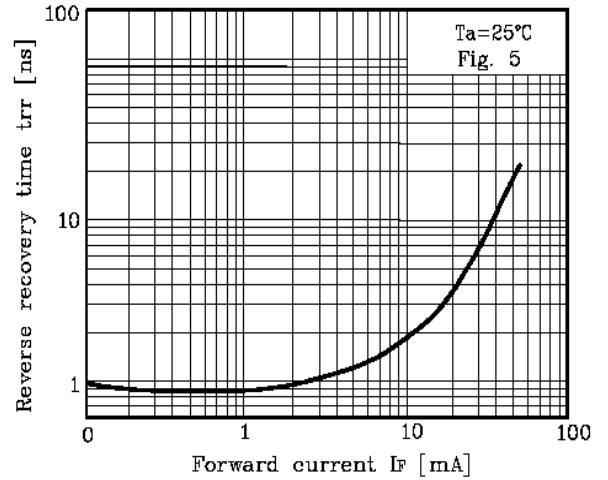


Fig. 5 Reverse Recovery Time Test Circuit

