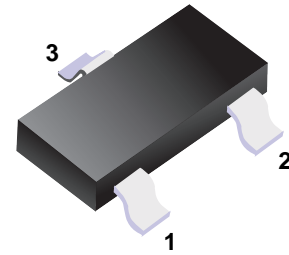


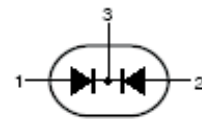
■ **Switching Diode**

■ **Features**

- Small Package
- Low forward voltage : $V_{F(3)} = 0.9\text{ V(Typ.)}$
- Fast Reverse Recovery Time : $t_{rr} = 1.6\text{ ns(Typ.)}$
- Small Total Capacitance : $C_T = 0.9\text{ pF(Typ.)}$



■ **Simplified outline(SOT-23)**



■ **Marking**

Marking	B3
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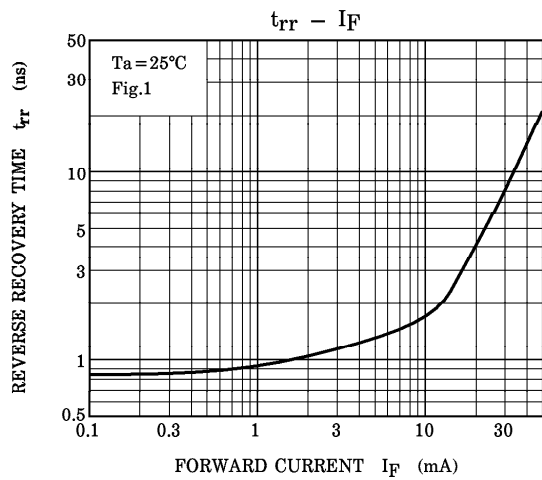
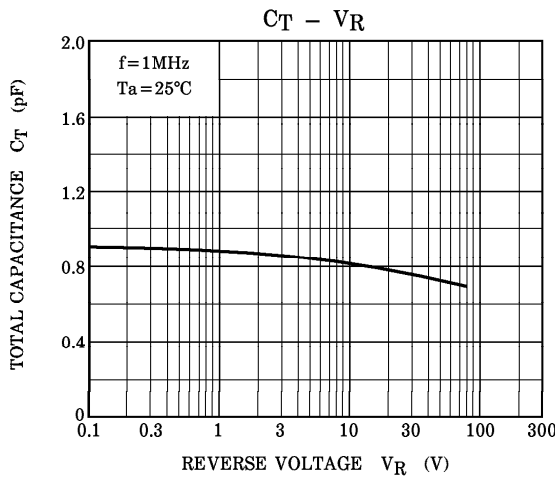
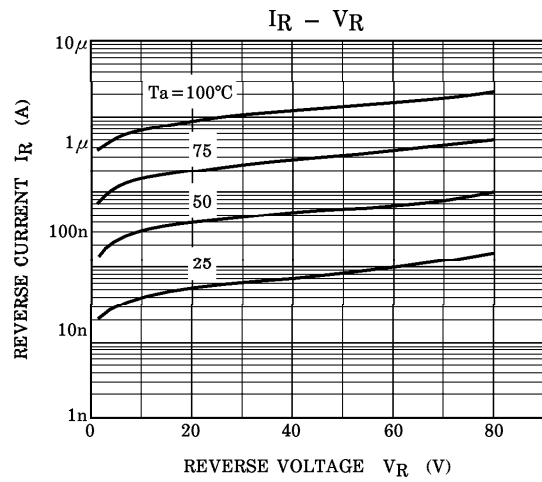
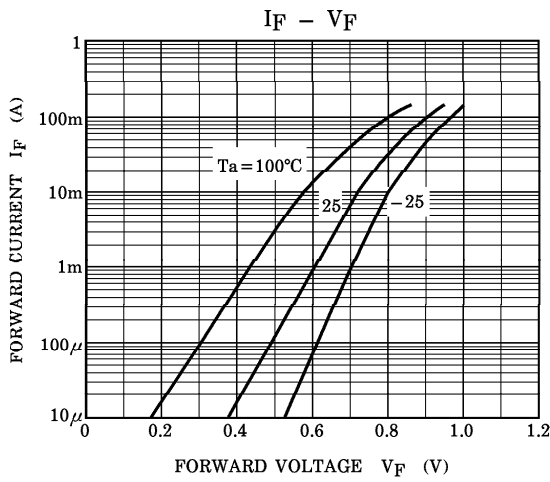
■ **Absolute Maximum Ratings** $T_a = 25^\circ\text{C}$

Parameter	Symbol	Rating	Unit
Peak Reverse voltage	V_{RM}	85	V
DC Blocking Voltage	V_R	80	
Average Rectified Output Current	I_o	100	mA
Peak forward surge current	I_{FM}	300	
Power Dissipation	P_D	150	mW
Junction Temperature	T_J	125	$^\circ\text{C}$
Storage temperature range	T_{stg}	-55 to 150	

■ **Electrical Characteristics** $T_a = 25^\circ\text{C}$

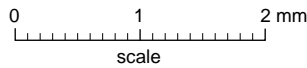
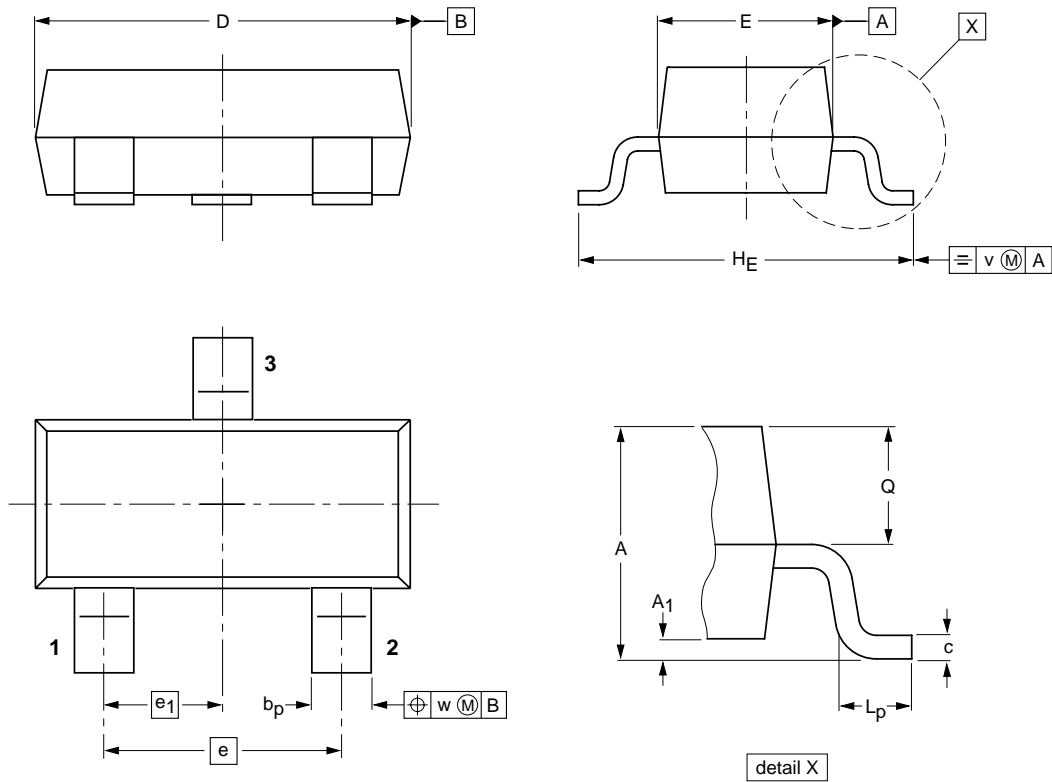
Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Reverse breakdown voltage	V_R	$I_R = 100\ \mu\text{A}$	80			V
Forward voltage	V_{F1}	$I_F = 1\ \text{mA}$		0.6		
	V_{F2}	$I_F = 10\ \text{mA}$		0.72		
	V_{F3}	$I_F = 100\ \text{mA}$		0.9	1.2	
Reverse voltage leakage current	I_{R1}	$V_R = 30\ \text{V}$			0.1	μA
	I_{R2}	$V_R = 80\ \text{V}$			0.5	
Capacitance between terminals	C_T	$V_R = 0\ \text{V}, f = 1\ \text{MHz}$		0.9	3	pF
Reverse recovery time	t_{rr}	$I_F = 10\ \text{mA}$		1.6	4	ns

■ Typical Characteristics



Package Outline

SOT-23



DIMENSIONS (mm are the original dimensions)

UNIT	A	A ₁ max.	b _p	c	D	E	e	e ₁	H _E	L _p	Q	v	w
mm	1.1 0.9	0.1	0.48 0.38	0.15 0.09	3.0 2.8	1.4 1.2	1.9	0.95	2.5 2.1	0.45 0.15	0.55 0.45	0.2	0.1

Summary of Packing Options

Package	Packing Description	Packing Quantity	Industry Standard
SOT-23	Tape/Reel, 7" reel	3000	EIA-481-1