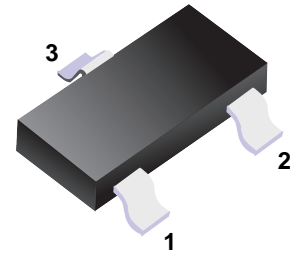


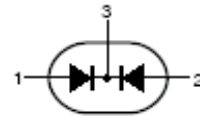
## ■ Switching Diode

### ■ 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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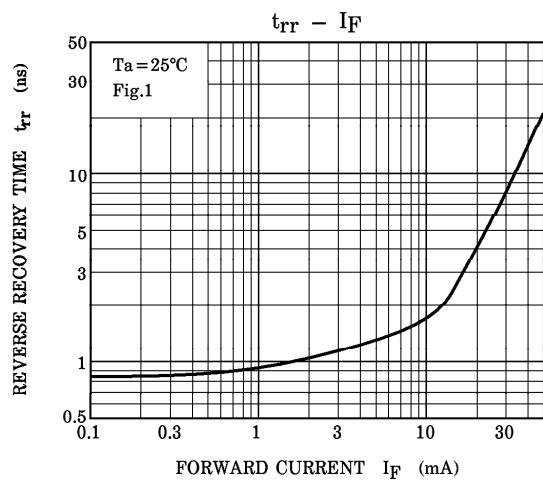
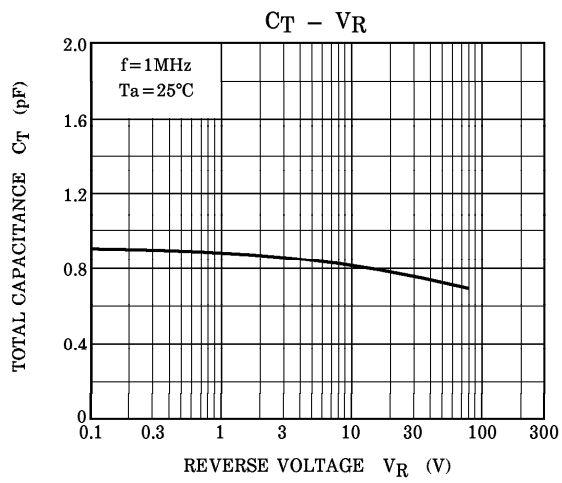
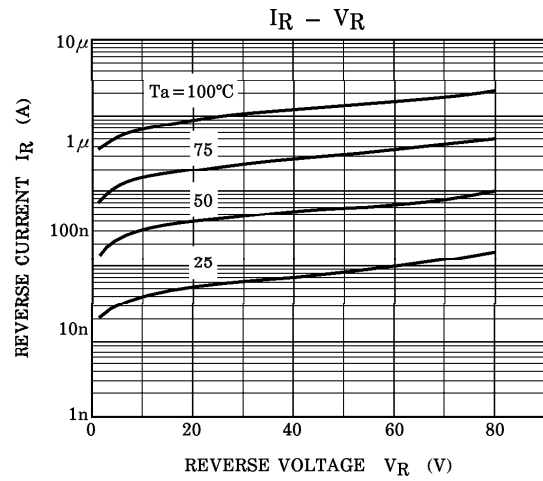
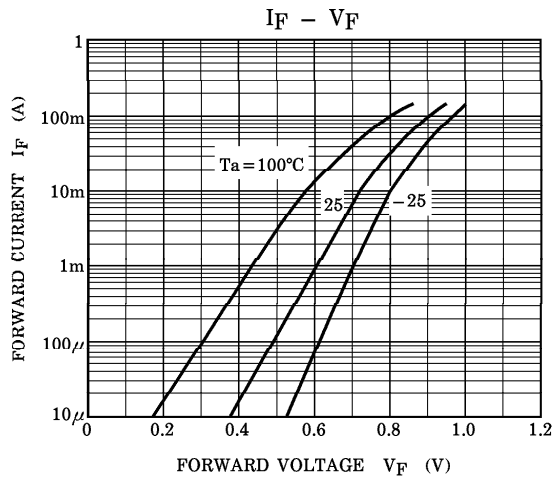
### ■ Absolute Maximum Ratings $T_a = 25^\circ\text{C}$

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	

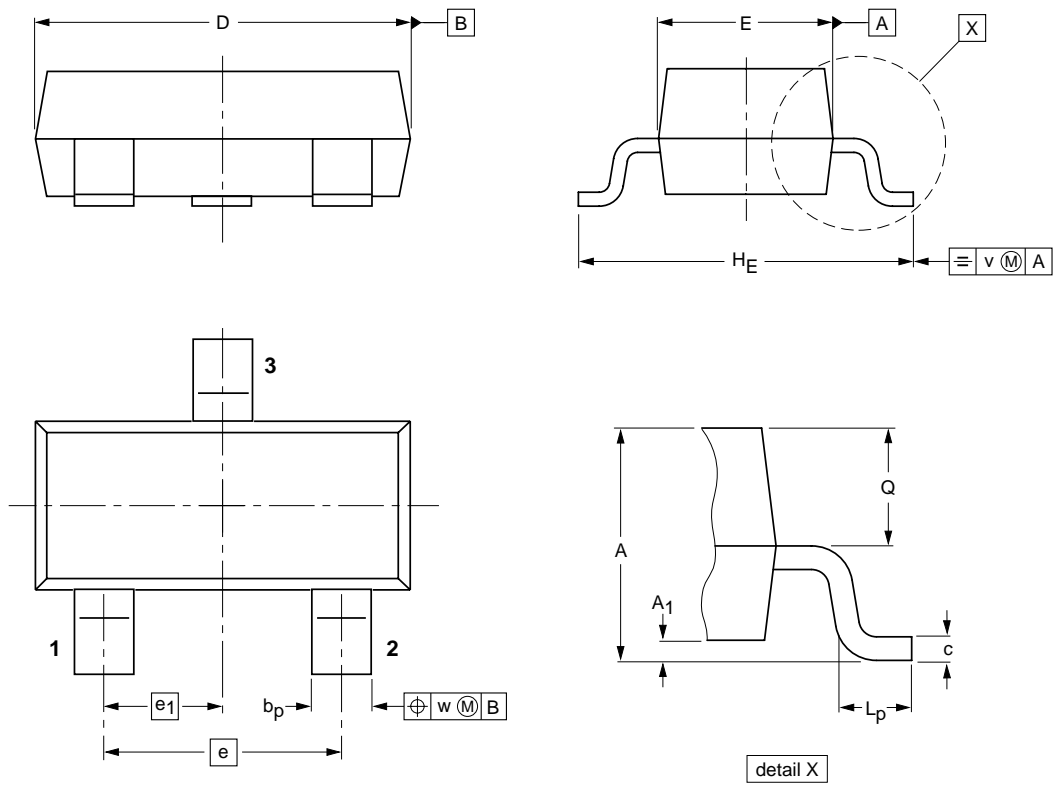
### ■ Electrical Characteristics $T_a = 25^\circ\text{C}$

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Reverse breakdown voltage	$V_R$	$I_R = 100 \text{ }\mu\text{A}$	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	$\mu\text{A}$
	$I_{R2}$	$V_R = 80 \text{ V}$			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



## ■ SOT-23



**DIMENSIONS (mm are the original dimensions)**

UNIT	A	A <sub>1</sub> max.	b <sub>p</sub>	c	D	E	e	e <sub>1</sub>	H <sub>E</sub>	L <sub>p</sub>	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