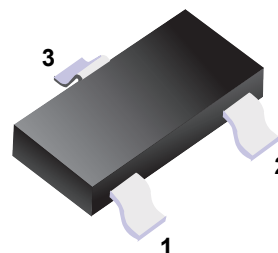


## Switching Diodes

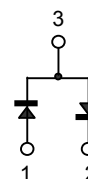
### ■ Features

- Ultra high speed switching
- High reliability



1.Base  
2.Emitter  
3.Collector

### ■ Simplified outline(SOT-23)



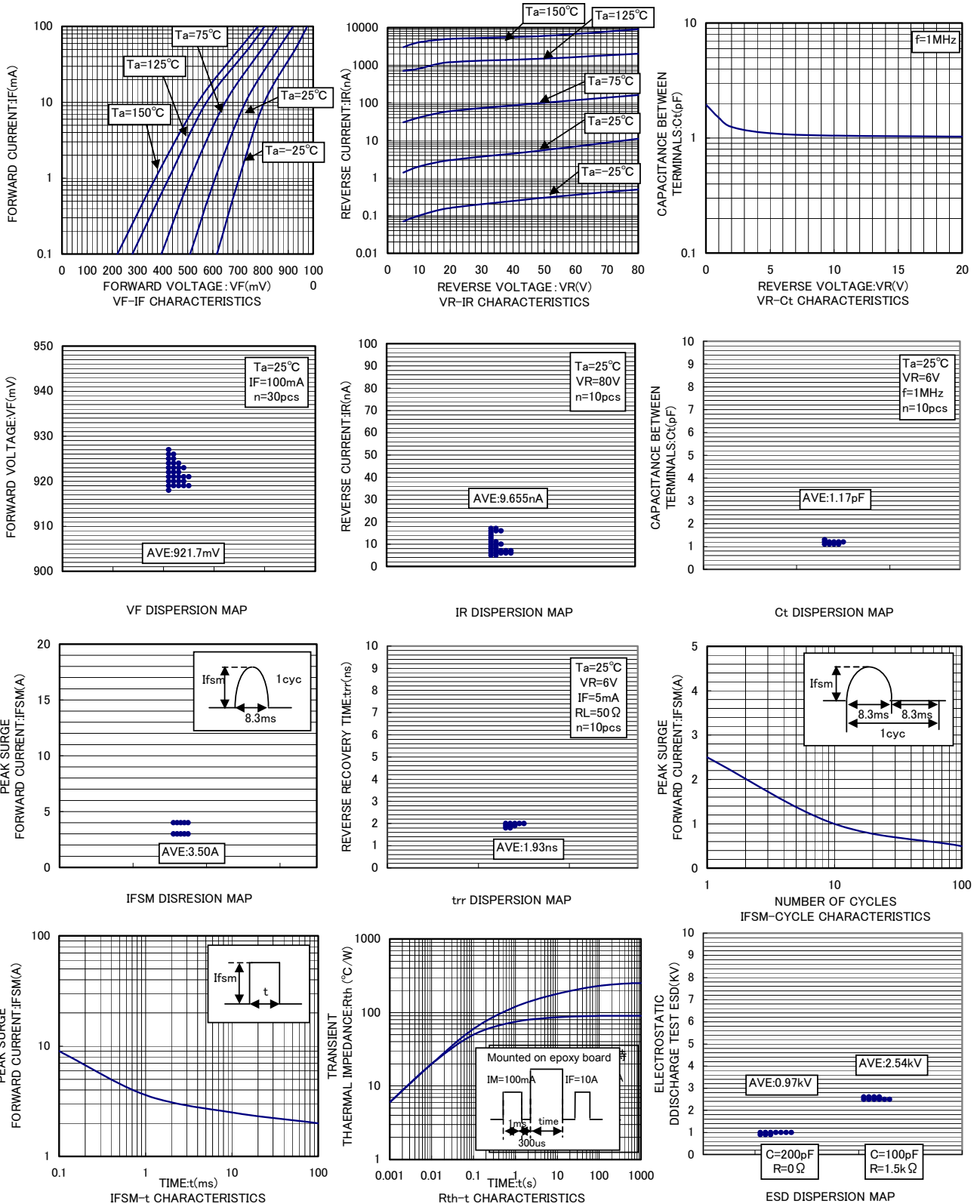
### ■ Absolute Maximum Ratings Ta = 25°C

Parameter	Symbol	Rating	Unit
Reverse Voltage	V <sub>RM</sub>	80	V
Reverse Voltage (DC)	V <sub>R</sub>	80	
Average rectified forward current (Single)	I <sub>o</sub>	100	mA
Forward Current (Single)	I <sub>FM</sub>	300	
Surge current (t=1us)	I <sub>surge</sub>	4	A
Power Dissipation	P <sub>d</sub>	200	mW
Junction Temperature	T <sub>J</sub>	150	°C
Storage Temperature range	T <sub>stg</sub>	-55 to 150	

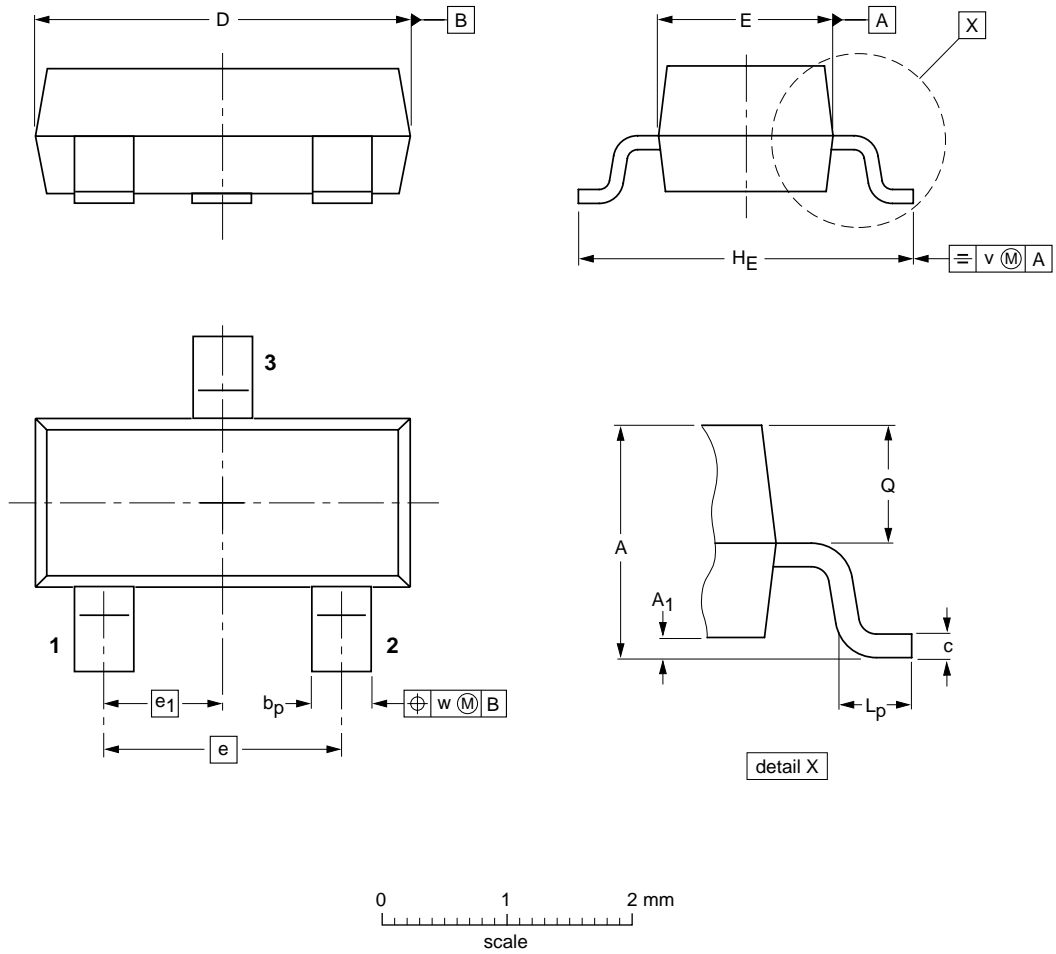
### ■ Electrical Characteristics Ta = 25°C

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Reverse breakdown voltage	V <sub>R</sub>	I <sub>R</sub> = 100 uA	80			V
Forward voltage	V <sub>F</sub>	I <sub>F</sub> = 100 mA			1.2	
Reverse voltage leakage current	I <sub>R</sub>	V <sub>R</sub> = 70 V			0.1	uA
Capacitance between terminals	C <sub>t</sub>	V <sub>R</sub> = 6 V, f= 1 MHz			3.5	pF
Reverse recovery time	t <sub>rr</sub>	V <sub>R</sub> =6V, I <sub>F</sub> =5mA, R <sub>L</sub> =50Ω			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