

# Bi direction ESD Protection Diode

## RSB39F2

● **Applications**

ESD Protection

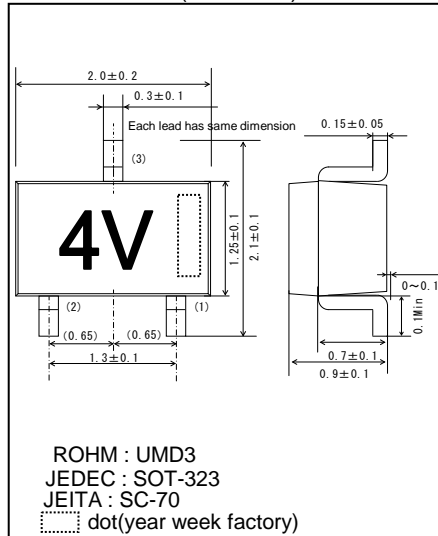
● **Features**

- 1) Small mold type. (UMD3)
- 2) High reliability.
- 3) Bi-directionality.

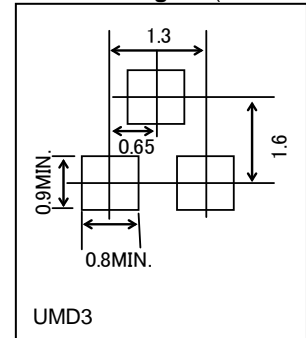
● **Constructions**

Silicon epitaxial planer

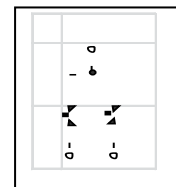
● **Dimensions (Unit : mm)**



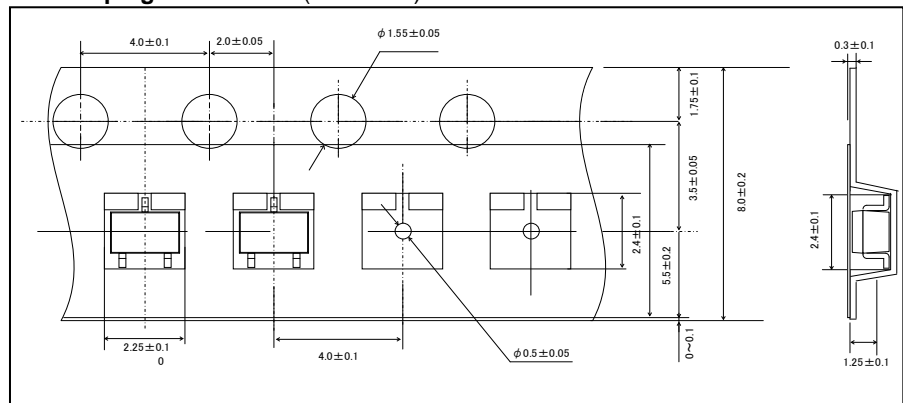
● **Land size figure (Unit : mm)**



● **Structure**



● **Taping dimensions (Unit : mm)**



● **Absolute maximum ratings (Ta=25°C)**

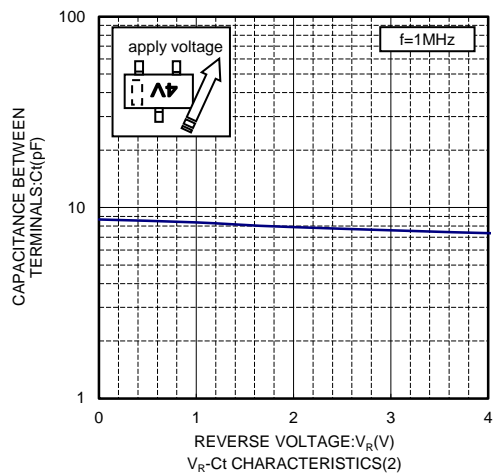
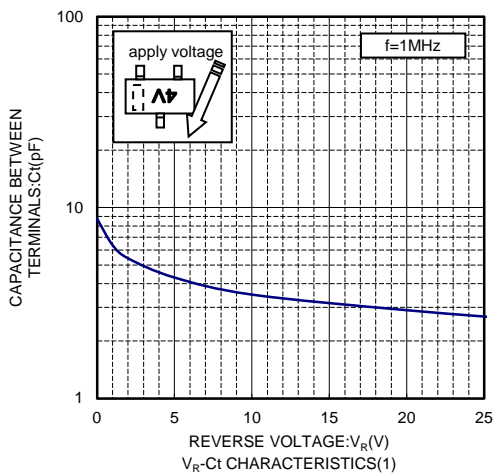
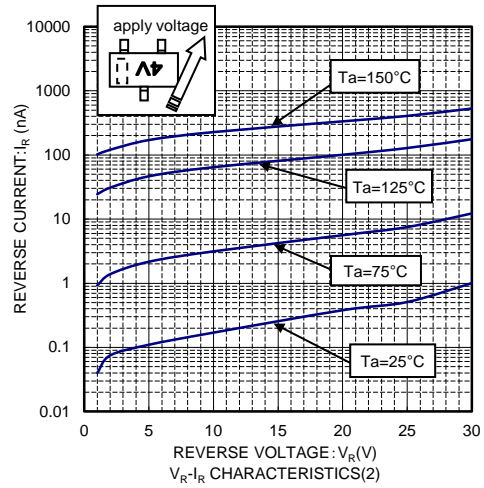
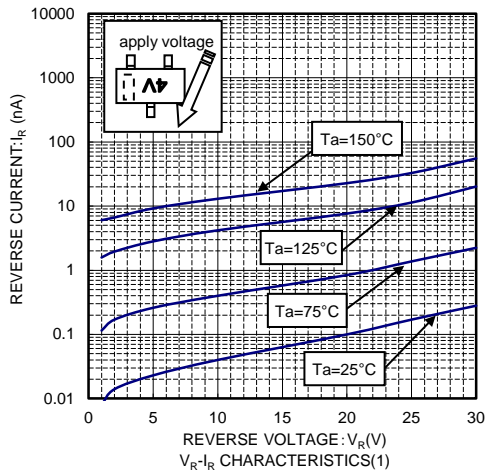
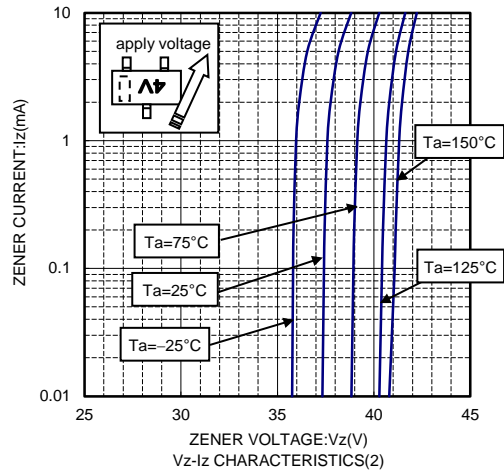
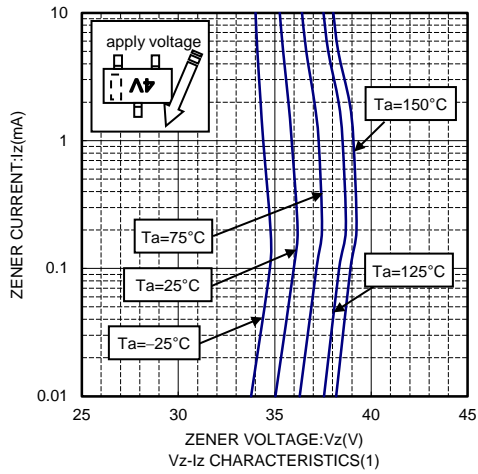
Parameter	Symbol	Limits	Unit
Power dissipation (*)	Pd	200	mW
Junction temperature	Tj	150	°C
Storage temperature	Tstg	-55 to +150	°C

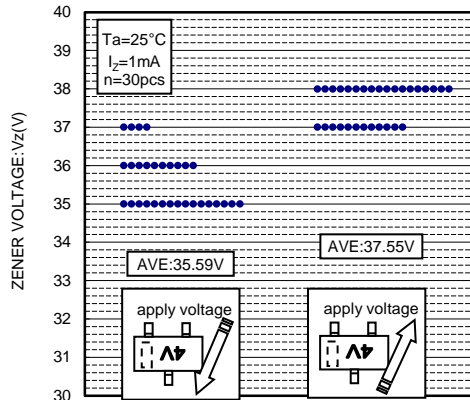
(\*) Total two elements

● **Electrical characteristics (Ta=25°C)**

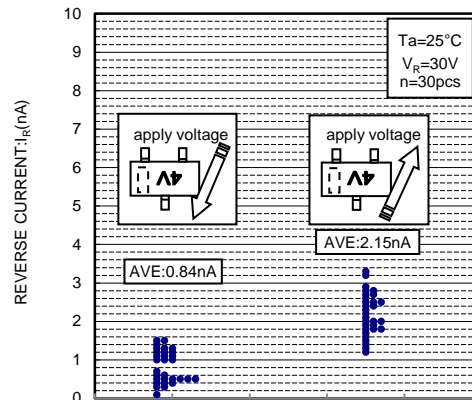
Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Zener voltage	Vz	35.1	-	42.9	V	Iz=1mA
Reverse current	IR	-	-	0.1	μA	VR=30V
Junction capacitance	Ct	-	-	30	pF	VR=0V, f=1MHz

\* Zener voltage (Vz) shall be measured at 40ms after loading current. Rating of per diode.

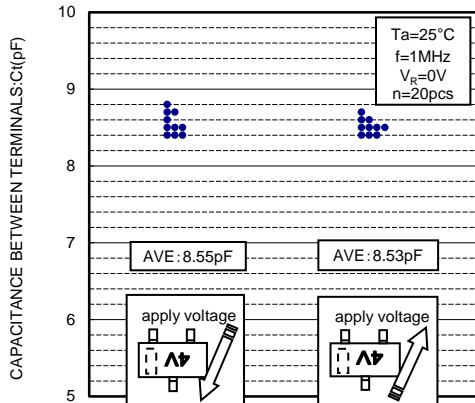




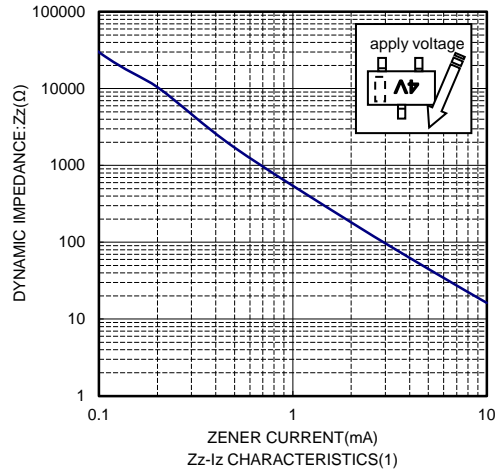
Vz DISPERSION MAP



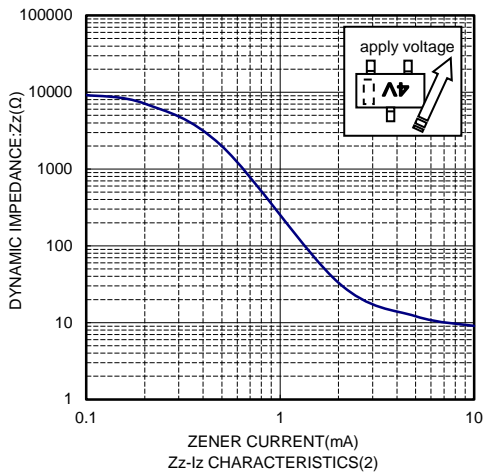
IR DISPERSION MAP



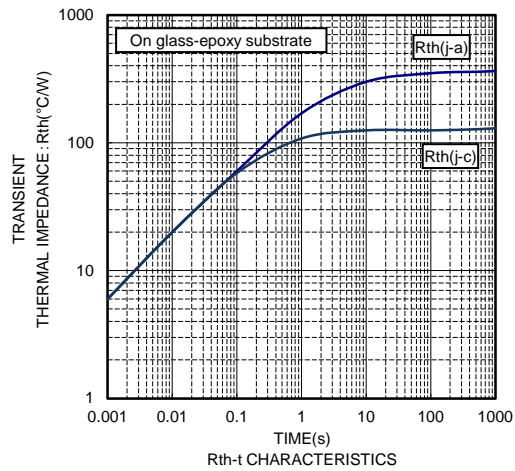
Ct DISPERSION MAP



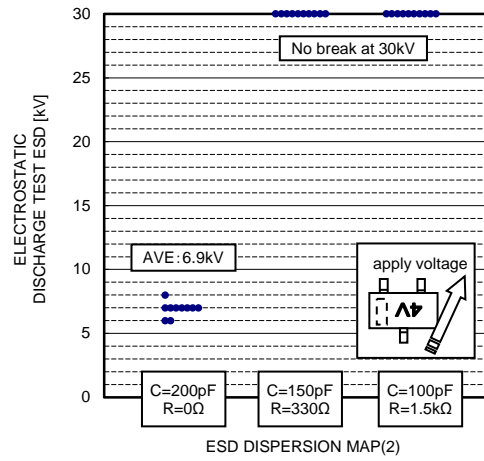
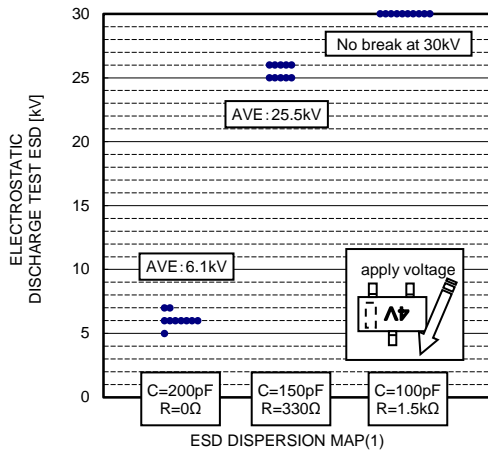
Zz-Iz CHARACTERISTICS(1)



Zz-Iz CHARACTERISTICS(2)



Rth-t CHARACTERISTICS



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