

# Bi direction ESD Protection Diode

## RSB33F2

●Applications

ESD Protection

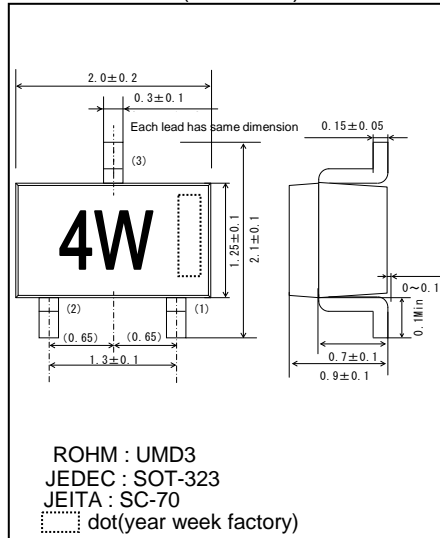
●Features

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

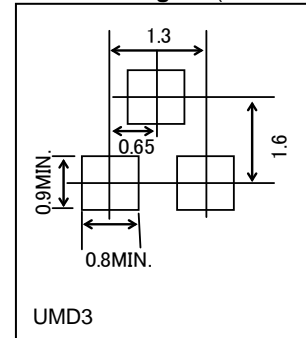
●Constructions

Silicon epitaxial planer

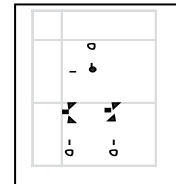
●Dimensions (Unit : mm)



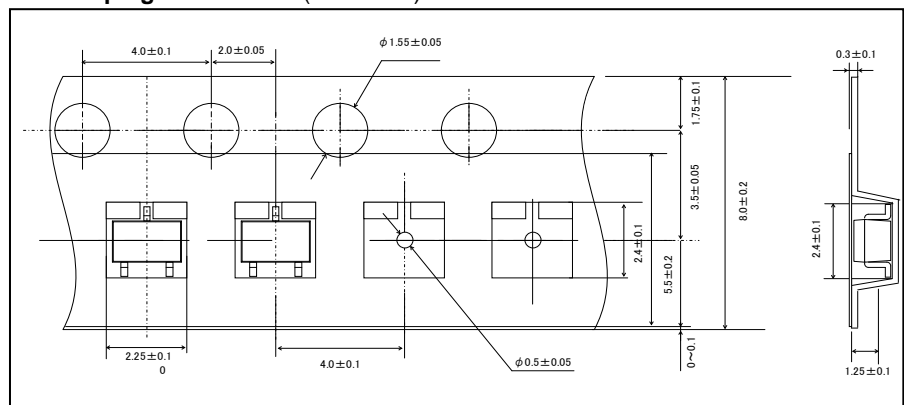
●Land size figure (Unit : mm)



●Structure



●Taping dimensions (Unit : mm)



●Absolute maximum ratings (Ta=25°C)

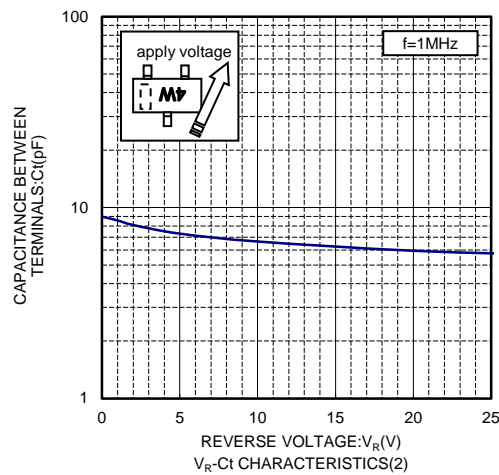
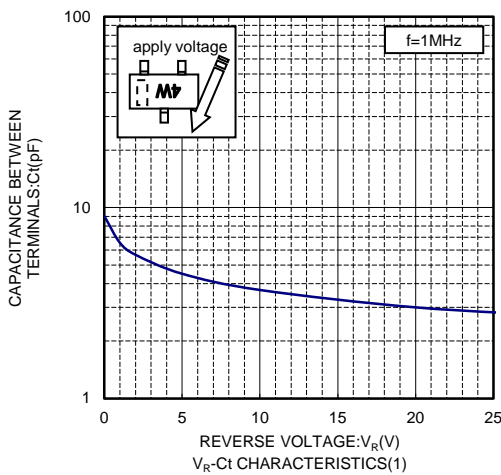
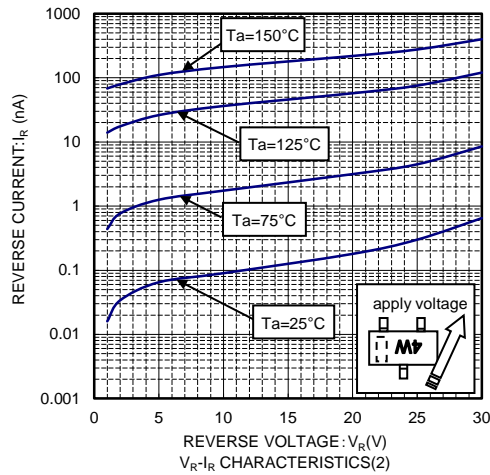
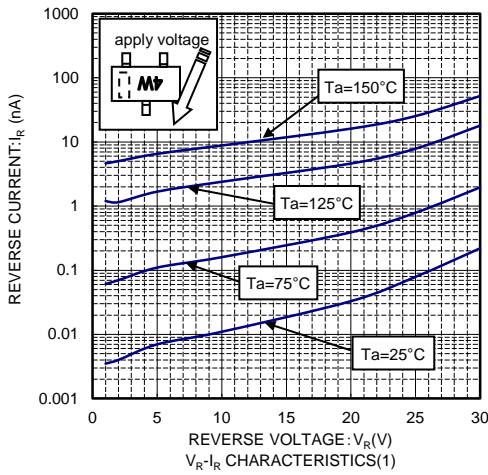
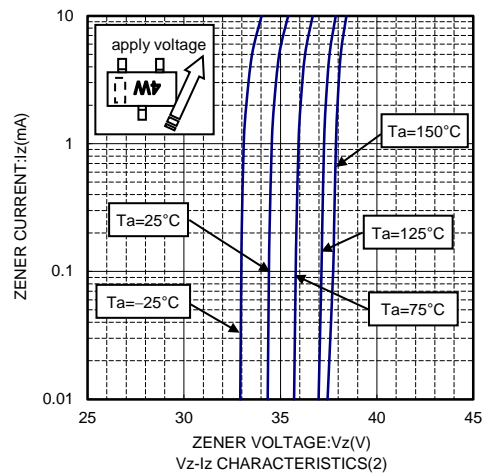
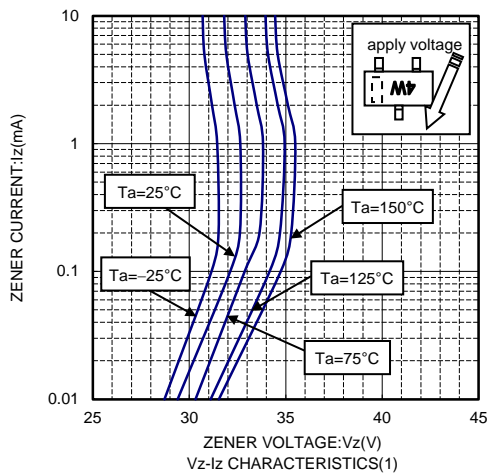
Parameter	Symbol	Limits	Unit
Power dissipation(*)	Pd	200	mW
Junction temperature	Tj	150	°C
Storage temperature	Tstg	-55 to +150	°C

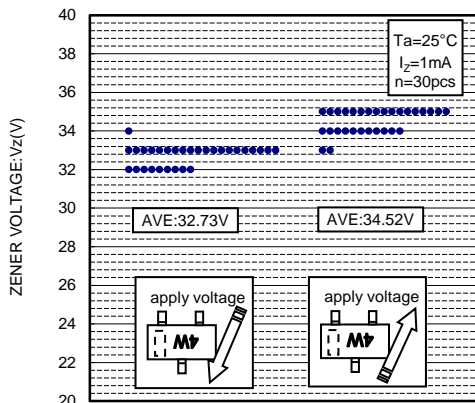
(\*)Total two elements

●Electrical characteristics (Ta=25°C)

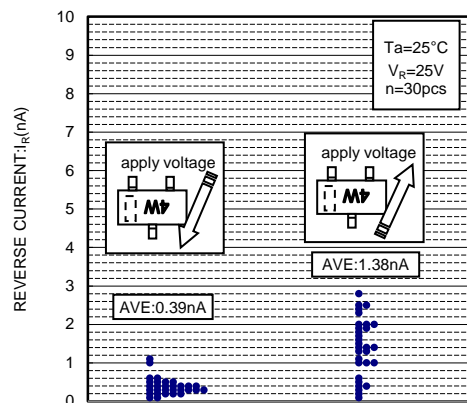
Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Zener voltage	Vz	29.7	-	36.3	V	Iz=1mA
Reverse current	IR	-	-	0.1	μA	VR=25V
Junction capacitance	Ct	-	-	30	pF	VR=0V, f=1MHz

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

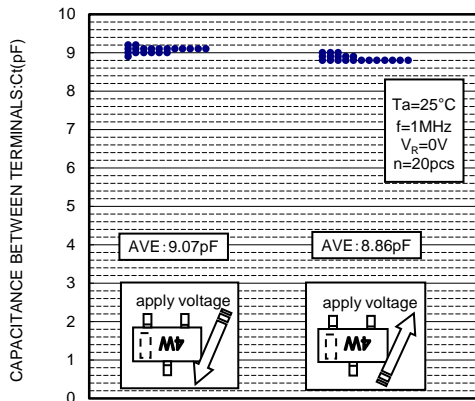




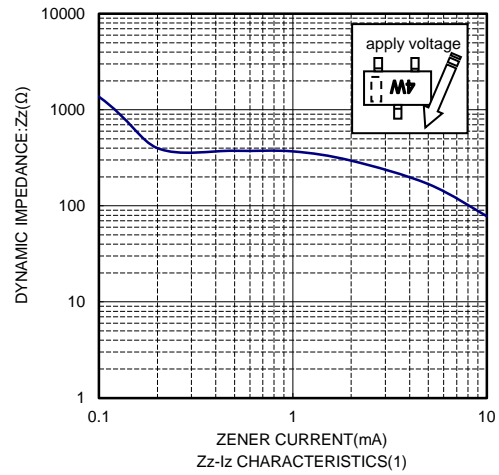
Z<sub>v</sub> DISPERSION MAP



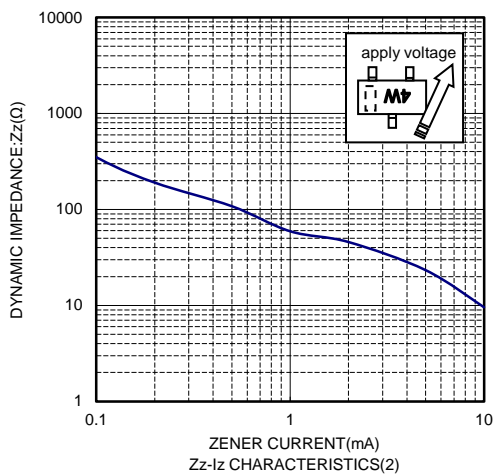
I<sub>r</sub> DISPERSION MAP



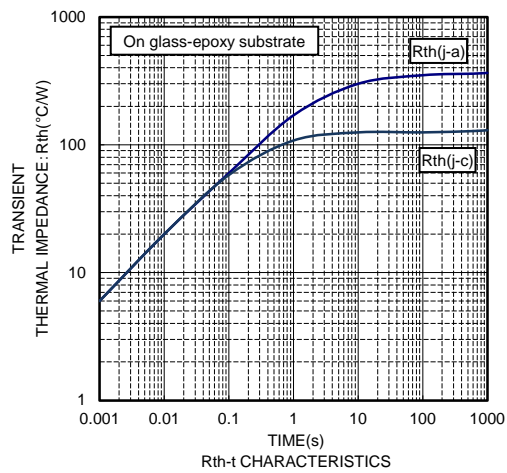
C<sub>t</sub> DISPERSION MAP



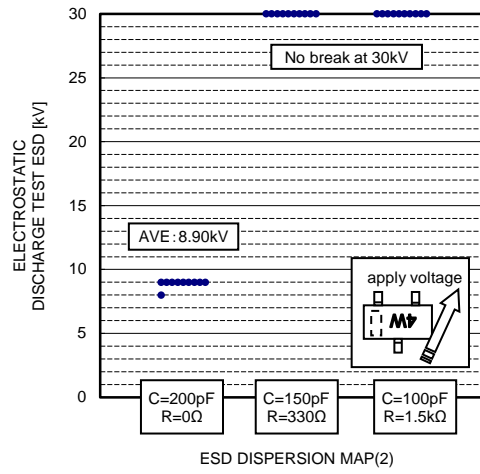
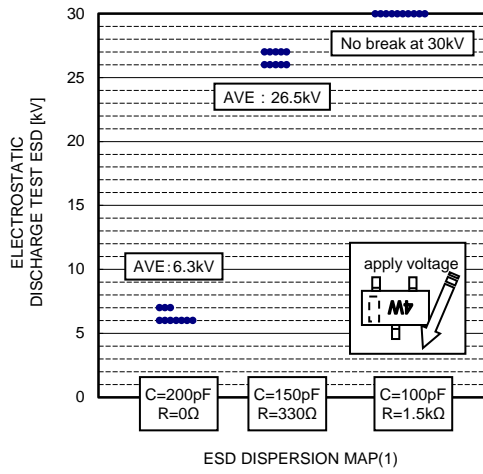
Z<sub>z</sub>-I<sub>z</sub> CHARACTERISTICS(1)



Z<sub>z</sub>-I<sub>z</sub> CHARACTERISTICS(2)



R<sub>th</sub>-t CHARACTERISTICS



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