

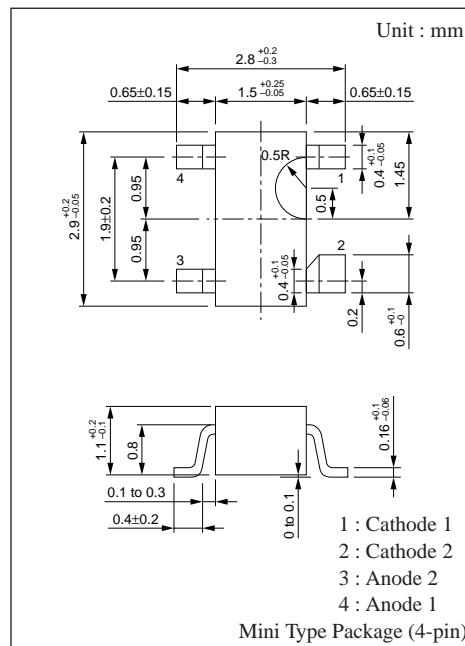
MA3100W

Silicon planer type

Constant voltage, constant current, waveform
clipper and surge absorption circuit

■ Features

- Mini type package (4-pin)
- Two-element wiring in parallel of MA3100



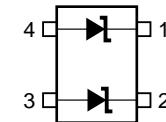
■ Absolute Maximum Ratings (Ta= 25°C)

Parameter	Symbol	Rating	Unit
Average forward current	Single I _{F(AV)}	100	mA
	Double I _{F(AV)}	75	mA
Instantaneous forward current	Single I _{FRM}	200	mA
	Double I _{FRM}	150	mA
Total power dissipation	Single P _{tot} * ¹	150	mW
	Double P _{tot} * ¹	110	mW
Non-repetitive reverse surge power dissipation	P _{ZSM} * ²	15	W
Junction temperature	T _j	125	°C
Storage temperature	T _{stg}	-55 to +125	°C

*¹ With a printed-circuit board

*² t=100μ s, T_j=125°C

■ Internal Connection



■ Electrical Characteristics (Ta= 25°C)*¹

Parameter	Symbol	Condition	min	typ	max	Unit
Forward voltage	V _F	I _F =10mA		0.8	0.9	V
Zener voltage	V _Z * ²	I _Z = 5mA	9.4	10.0	10.6	V
Operating resistance	R _{ZK}	I _Z = 0.5mA			130	Ω
	R _Z	I _Z = 5mA		8	20	Ω
Reverse current	I _{R1}	V _R = 7V			0.2	μA
	I _{R2}	V _R = 8.9V			60	μA
Temperature coefficient of zener voltage	S _Z * ³	I _Z = 5mA	4.5	6.4	8.0	mV/°C
Terminal capacitance	C _t	V _R = 0V, f=1MHz		70	90	pF

Note 1. Rated input/output frequency : 5MHz

2. *¹ : The V_Z value is for the temperature of 25°C. In other cases, carry out the temperature compensation.

*² : Guaranteed at 20ms after power application

*³ : T_j= 25 to 125°C

■ Marking



