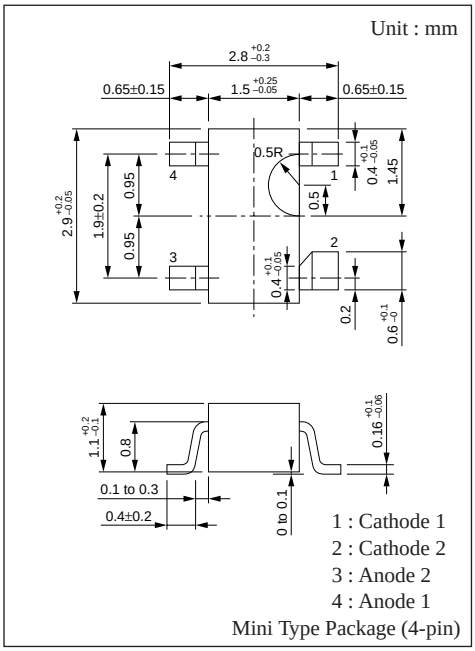
MA3047W

Silicon planer type

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

■ Features

- Mini type package (4-pin)
- Two-element wiring in parallel of MA3047

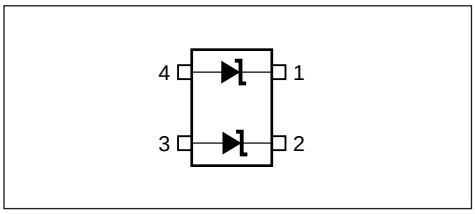


■ Absolute Maximum Ratings (Ta= 25˚C)

Parameter		Symbol	Rating	Unit
Average forward current	Single	$I_{F(AV)}$	100	mA
	Double	$I_{F(AV)}$	75	mA
Instanious forward current	Single	I_{FRM}	200	mA
	Double	I_{FRM}	150	mA
Total power dissipation	Single	P_{tot}*1	200	mW
	Double	P_{tot}*1	150	mW
Non-repetitive reverse surge power dissipation		P_{ZSM}*2	15	W
Junction temperature		T_j	150	˚C
Storage temperature		T_{stg}	– 55 to + 150	˚C

*1 With a printed-circuit board
*2 t=100µ s, T_j=150˚C

■ Internal Connection



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

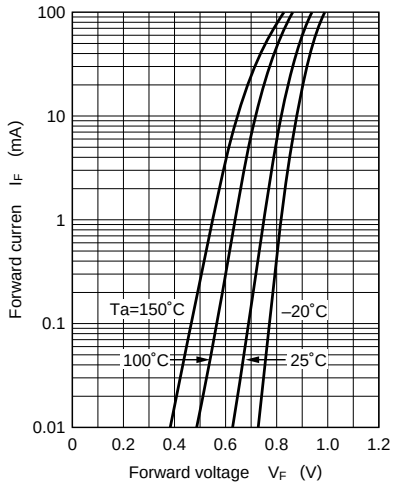
Parameter	Symbol	Condition	min	typ	max	Unit
Forward voltage	V_F	I_F=10mA		0.8	0.9	V
Zener voltage	V_Z*2	I_Z= 5mA	4.4	4.7	5.0	V
Operating resistance	R_Z	I_Z= 5mA		50	80	Ω
Reverse current	I_R	V_R= 1V			3	µA
Temperature coefficient of zener voltage	S_Z*3	I_Z= 5mA	– 3.5	–1.4	0.2	mV/˚C

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 : Guaranteeed at 20ms after power application
* 3 : T_j= 25 to 125˚C

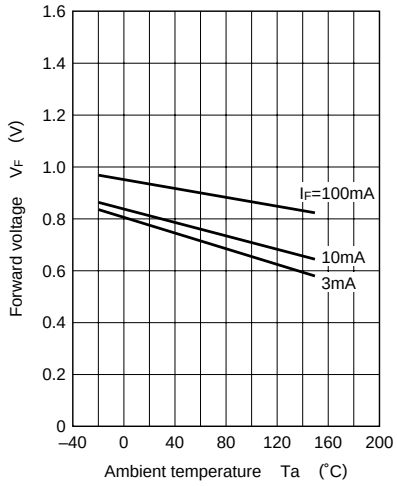
■ Marking



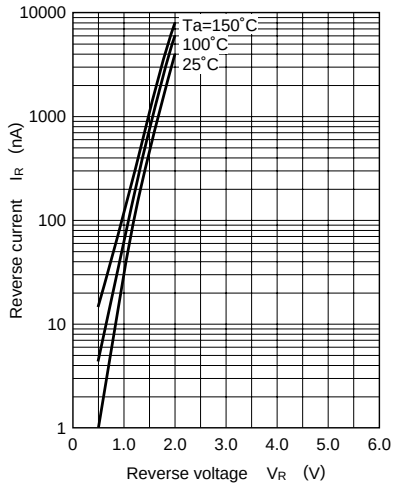
$I_F - V_F$



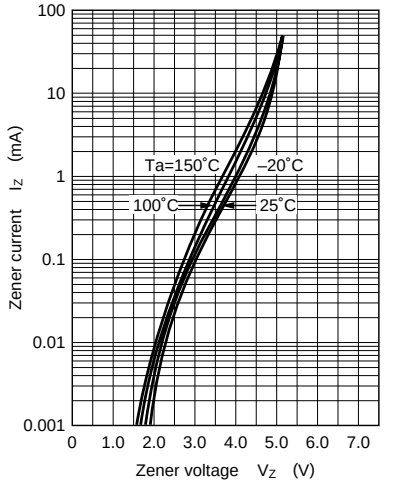
$V_F - Ta$



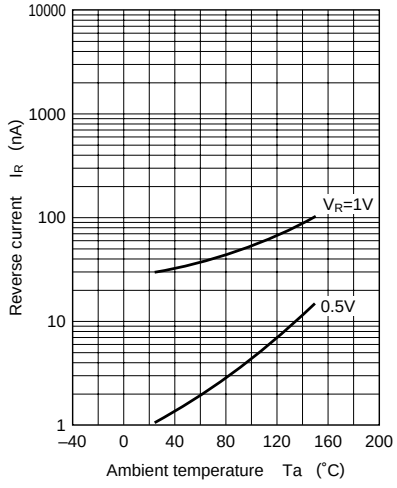
$I_R - V_R$



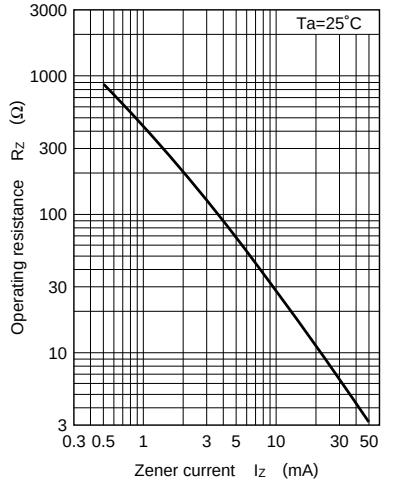
$I_Z - V_Z$



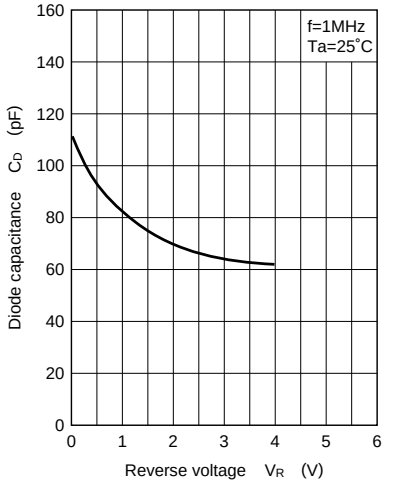
$I_R - Ta$



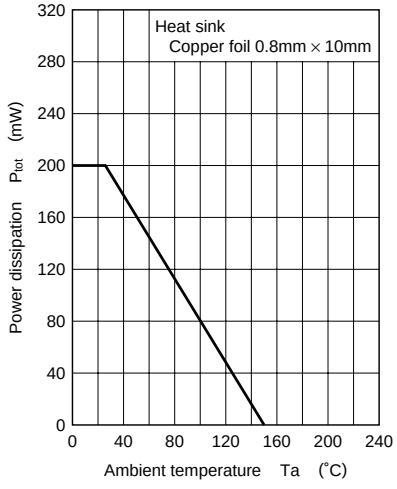
$R_Z - I_Z$



$C_D - V_R$



$P_{tot} - Ta$



$P_{ZSM} - t_W$

