

MA3075T

Silicon planer type

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

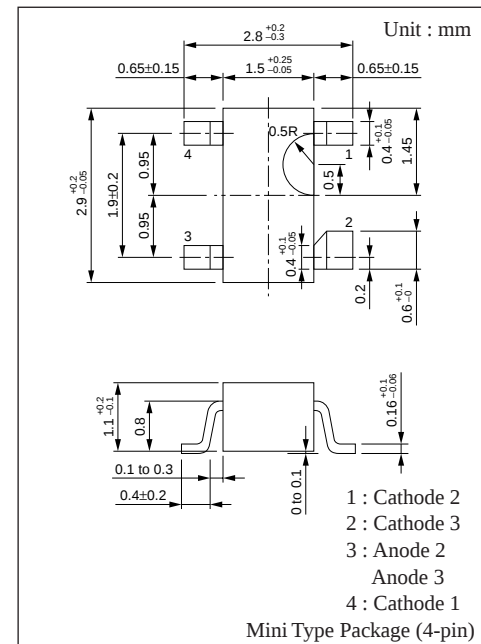
■ Features

- Mini type package (4-pin)
- Three anode-common wiring of MA3075

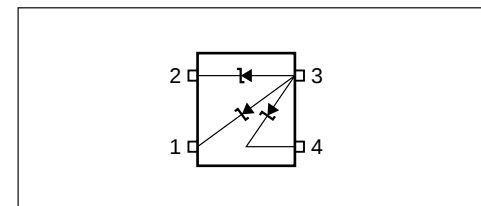
■ Absolute Maximum Ratings (Ta= 25°C)

Parameter		Symbol	Rating	Unit
Average forward current	Single	$I_{F(AV)}$	100	mA
	Triple	$I_{F(AV)}$	70	mA
Instantious forward current	Single	I_{FRM}	200	mA
	Triple	I_{FRM}	100	mA
Total power dissipation	Single	P_{tot}^*	200	mW
	Triple	P_{tot}^*	100	mW
Junction temperature		T_j	150	°C
Storage temperature		T_{stg}	- 55 to + 150	°C

* With a printed-circuit board



■ 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}	$I_Z= 5mA$	7.0	7.5	7.9	V
Operating resistance	R_{ZK}	$I_Z= 0.5mA$			120	Ω
	R_Z	$I_Z= 5mA$		6	15	Ω
Reverse current	I_{R1}	$V_R= 5V$			1	μA
	I_{R2}	$V_R= 6V$			2	μA
Temperature coefficient of zener voltage	S_Z^{*3}	$I_Z= 5mA$	2.5	4.0	5.3	mV/°C
Terminal capacitance	C_t	$V_R= 0V, f=1MHz$		80	100	pF

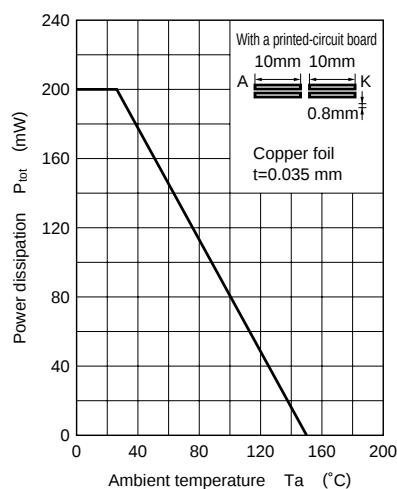
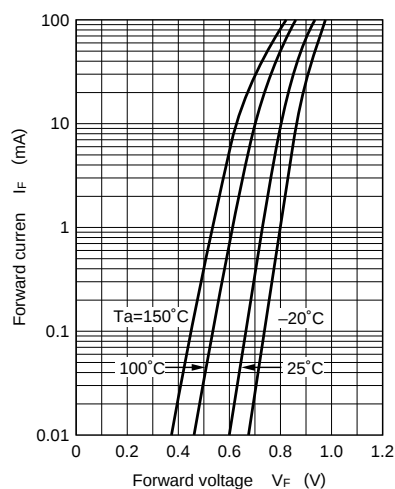
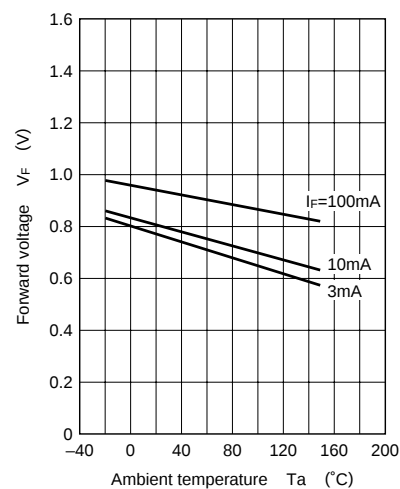
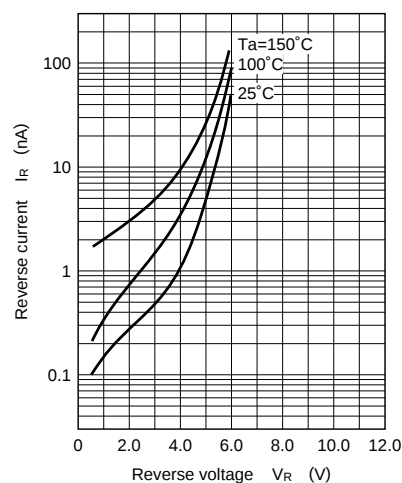
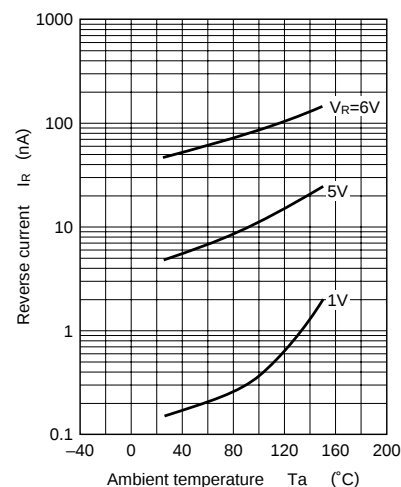
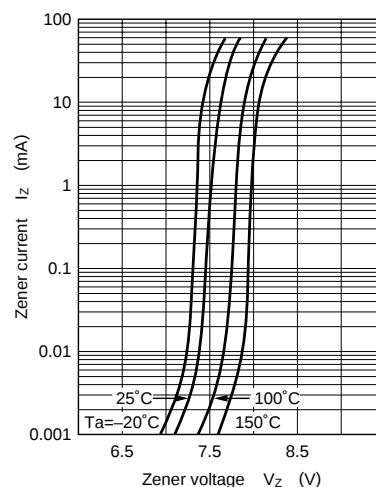
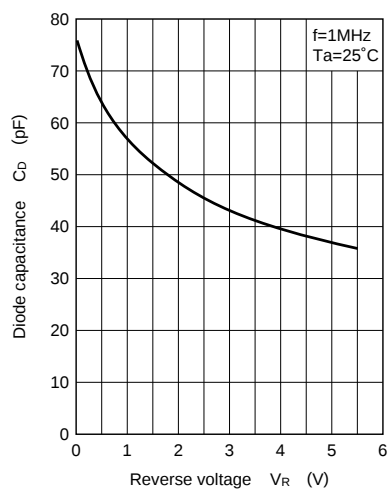
Note *1 : The V_Z value is for the temperature of 25°C. In other cases, carry out the temperature compensation.

*2 : Guaranteed at 20ms after power application

*3 : $T_j= 25$ to 150°C

■ Marking



$P_{\text{tot}} - T_a$  $I_F - V_F$  $V_F - T_a$  $I_R - V_R$  $I_R - T_a$  $I_Z - V_Z$  $C_D - V_R$  $R_Z - I_Z$ 