

MA6000 Series

Silicon planer type

For stabilization of power supply

■ Features

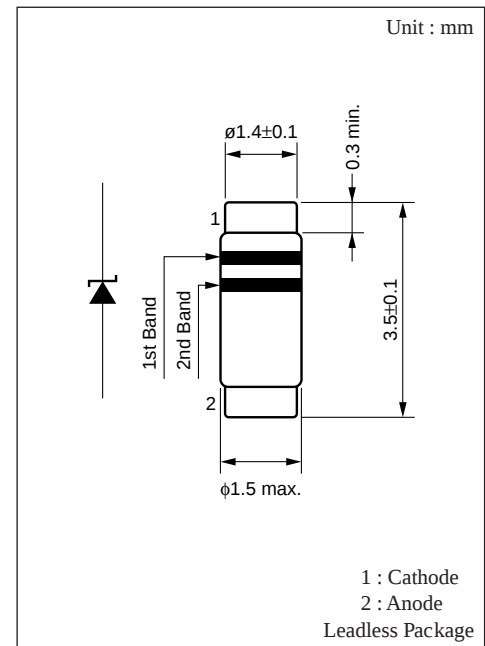
- LLD is shaped to be a small and lightweight cylinder without directionality, enabling high-density mounting
- Low operation resistance
- High reliability because of the same glass seal configuration as conventional DHD.

■ Absolute Maximum Ratings (Ta= 25°C)

Parameter	Symbol	Rating	Unit
Average forward current	$I_{F(AV)}$	100	mA
Instantaneous forward current	I_{FRM}	250	mA
Total power dissipation	P_{tot}^{*1}	400	mW
Non-repetitive reverse surge power dissipation	P_{ZSM}^{*2}	30	W
Junction temperature	T_j	200	°C
Storage temperature	T_{stg}	− 65 to + 200	°C

* 1 P_{tot} = 400W achieved with a printed-circuit board

* 2 $t = 100\mu s$, $T_j = 150^\circ C$



● Color indication of V_Z rank classification

1st band	2nd band
Brown	Black

■ Common 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 Specified value				V
Operating resistance	R_{ZK}	I_Z Specified value				Ω
	R_Z	I_Z Specified value	Refer to the individual product specification			Ω
Reverse current	I_{R1}	V_R Specified value				μA
	I_{R2}	V_R Specified value				μA
Temperature coefficient of zener voltage	S_Z^{*3}	I_Z Specified value				mV/°C

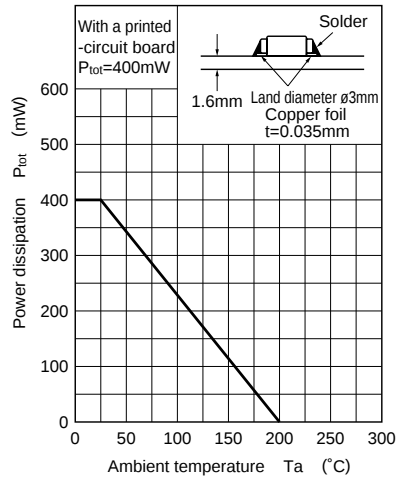
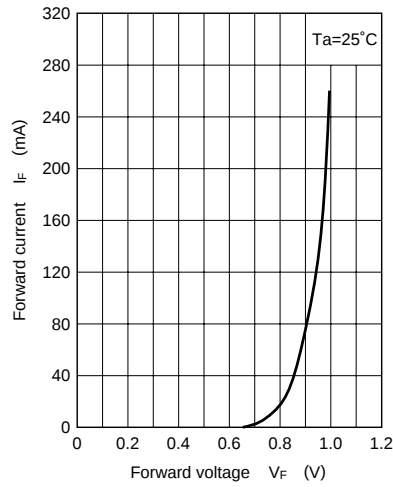
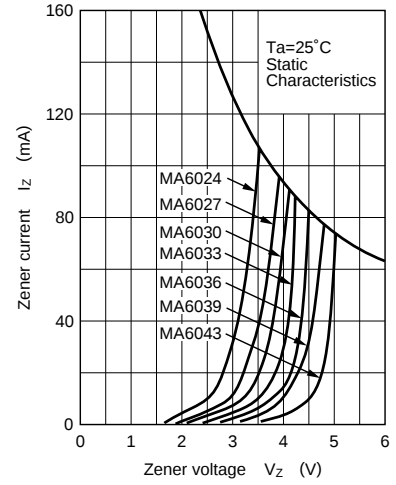
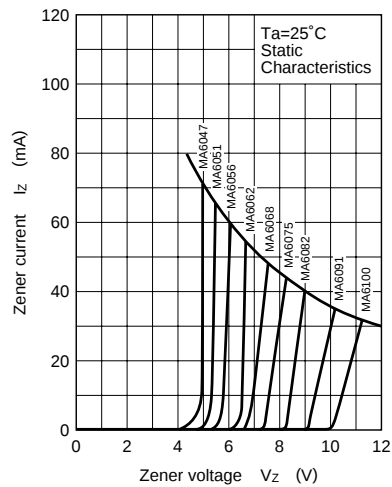
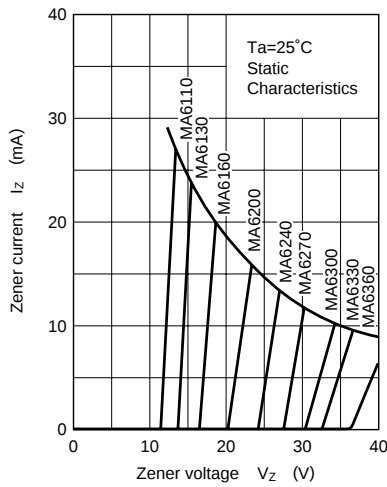
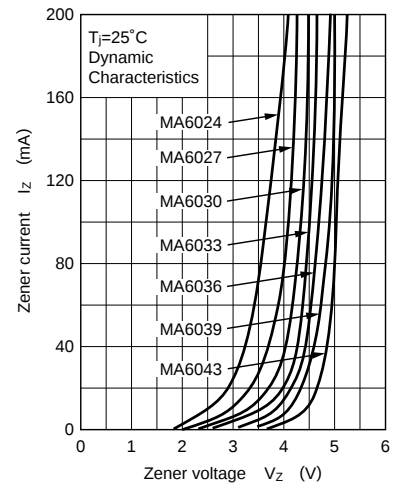
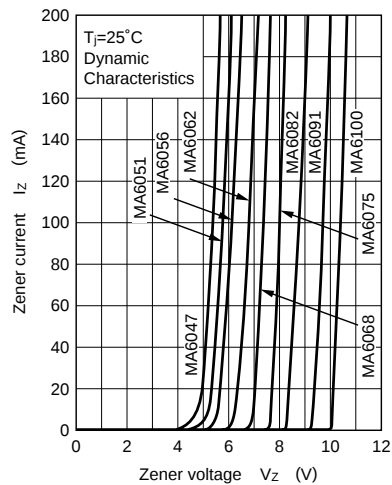
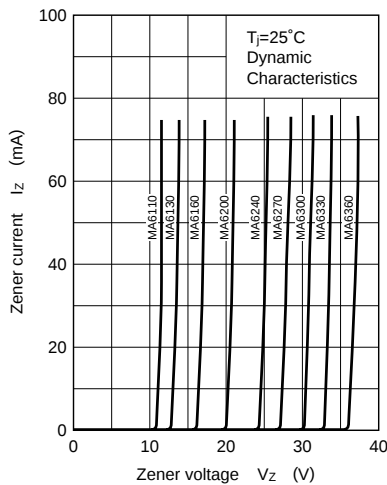
Note 1. Rated input/output frequency : 50MHz

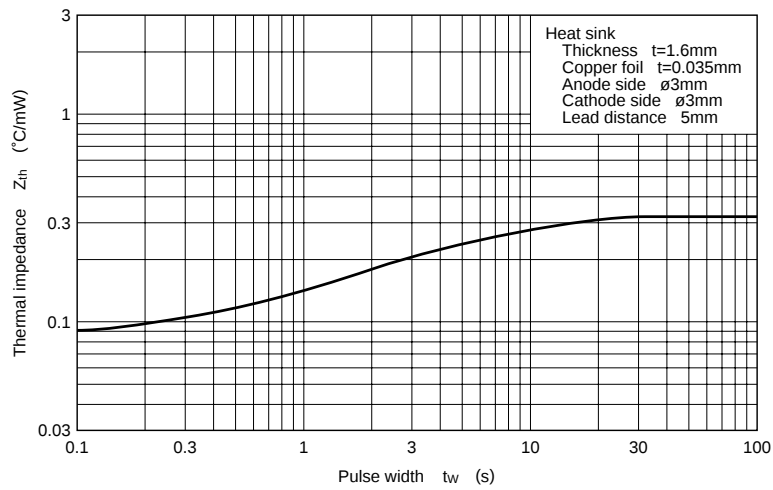
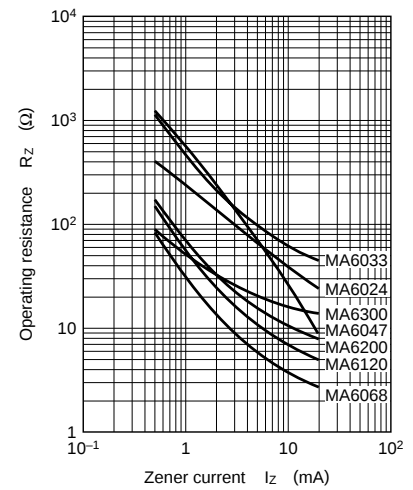
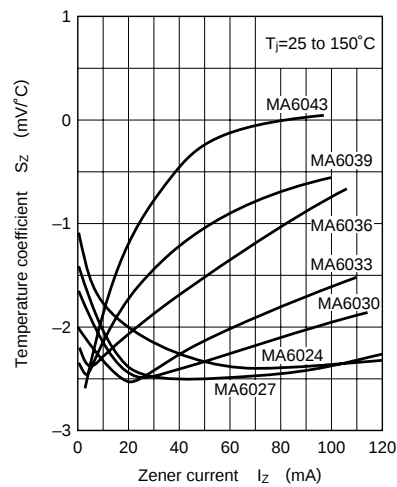
2. * 1 : The V_Z value is for the temperature of 25°C. In other cases, carry out the temperature compensation.

* 2 : Guaranteed at 20ms after power application

* 3 : $T_j = 25$ to $150^\circ C$

※ V_Z rank to be 4.7 to 24V to meet the demand.

$P_{\text{tot}} - T_a$  $I_F - V_F$  $I_Z - V_Z$  $I_Z - V_Z$  $I_Z - V_Z$  $I_Z - V_Z$  $I_Z - V_Z$  $I_Z - V_Z$ 

$Z_{th} - t_w$  $R_Z - I_Z$  $S_Z - I_Z$  $S_Z - I_Z$ 