

MA178, MA179

Silicon epitaxial planer type

For high speed switching circuits

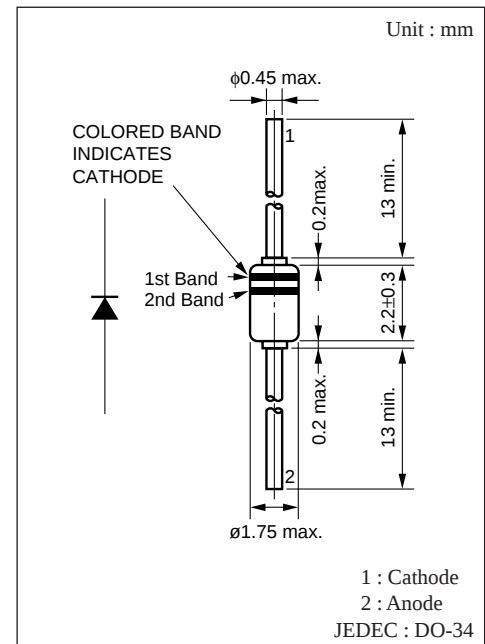
■ Features

- Large forward current $I_{F(AV)}$
- High switching speed
- Small capacity between pins, C_t

■ Absolute Maximum Ratings (Ta= 25°C)

Parameter	Symbol	Rating	Unit
Reverse voltage (DC)	V_R	40	V
		80	
Repetitive peak reverse voltage	V_{RRM}	40	V
		80	
Average forward current	$I_{F(AV)}$	200	mA
Repetitive peak forward current	I_{FRM}	600	mA
Non-repetitive peak forward surge current	I_{FSM}^*	1	A
Junction temperature	T_j	200	°C
Storage temperature	T_{stg}	- 55 to + 200	°C

* $t=1s$



■ Electrical Characteristics (Ta= 25°C)

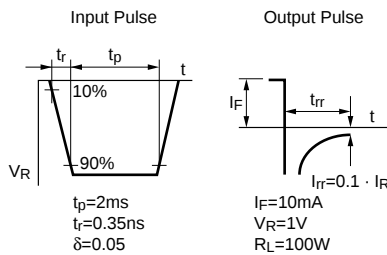
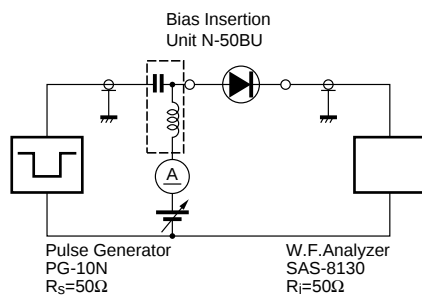
Parameter	Symbol	Condition	min	typ	max	Unit
Reverse current (DC)	I_{R1}	$V_R=15V$			50	nA
	I_{R2}	$V_R= 35V$			500	nA
					500	
	I_R	$V_R= 35V, T_a=150^{\circ}C$			100	μA
		$V_R=75V, T_a=150^{\circ}C$			100	
Forward voltage (DC)	V_F	$I_F= 200mA$			1.1	V
Terminal capacitance	C_t	$V_R= 0V, f=1MHz$			4	pF
Reverse recovery time	t_{rr}^*	$I_F=10mA, V_R=1V$ $I_{rr}= 0.1 \cdot I_R, R_L=100\Omega$			20	ns

❖ Rated input/output frequency : 50MHz

■ Cathode Indication

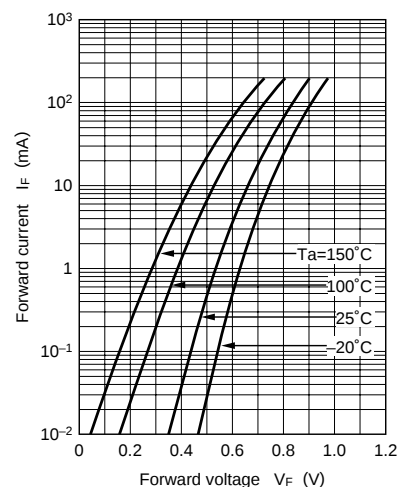
Type No.	MA178	MA179
Color	1st Band	Violet
	2nd Band	White

* t_{rr} measuring circuit



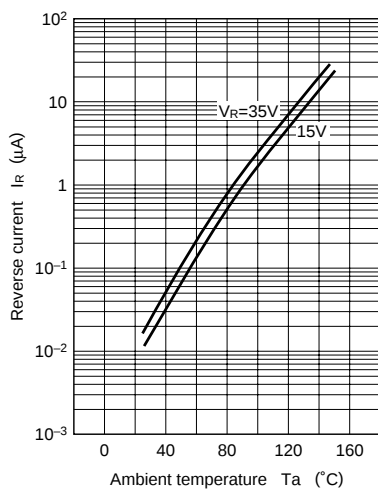
Common characteristics chart

$I_F - V_F$

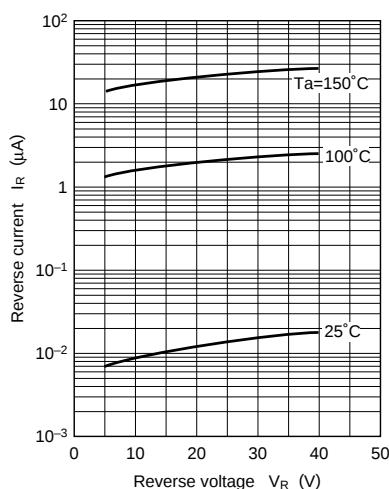


Characteristics chart of MA178

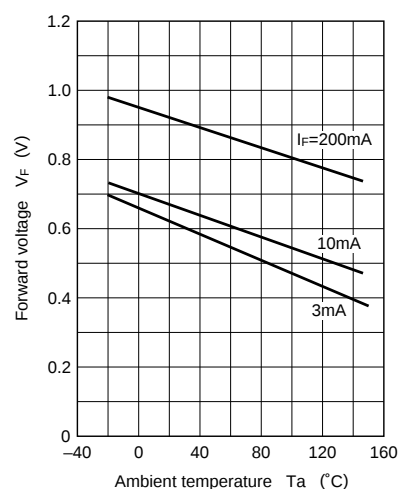
$I_R - T_a$



$I_R - V_R$

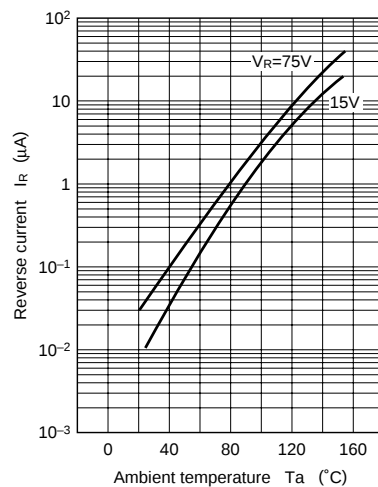


$V_F - T_a$

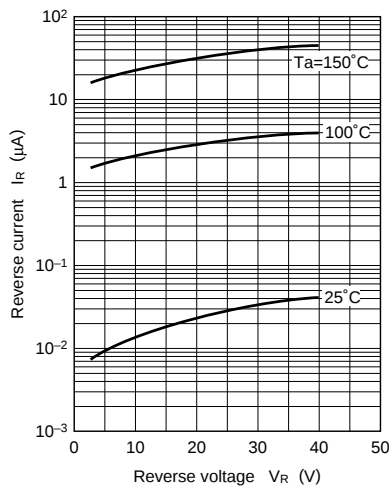


Characteristics chart of MA179

$I_R - T_a$



$I_R - V_R$



$C_t - V_R$

