

MA196

Silicon epitaxial planer type

For switching circuits

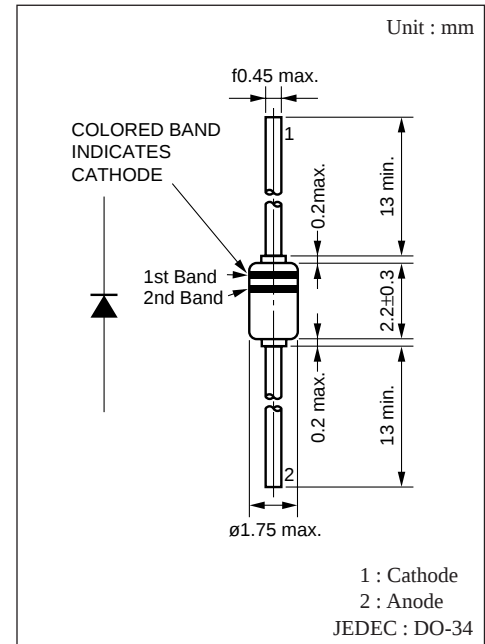
■ Features

- Low forward dynamic resistance r_f
- Small capacity between pins, C_t

■ Absolute Maximum Ratings (Ta= 25°C)

Parameter	Symbol	Rating	Unit
Forward voltage (DC)	V_R	50	V
Repetitive peak reverse voltage	V_{RRM}	50	V
Average forward current	$I_F (AV)$	100	mA
Repetitive peak forward current	I_{FRM}	225	mA
Non-repetitive peak forward surge current	$I_{FSM} *$	500	mA
Junction temperature	T_j	200	°C
Storage temperature	T_{stg}	- 55 to + 200	°C

* $t=1s$

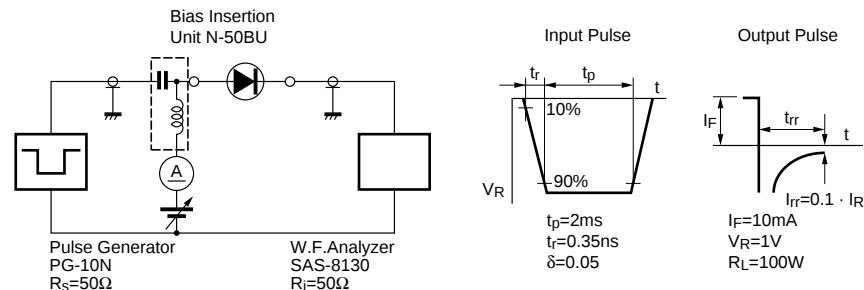


■ Electrical Characteristics (Ta= 25°C)

Parameter	Symbol	Condition	min	typ	max	Unit
Reverse current (DC)	I_{R1}	$V_R=15V$			5	nA
	I_{R2}	$V_R= 50V$			10	nA
	I_{R3}	$V_R= 50V, T_a=150^{\circ}C$			100	μA
Forward voltage (DC)	V_F	$I_F=100mA$			1.2	V
Reverse voltage (DC)	V_R	$I_R=100\mu A$	50			V
Terminal capacitance	C_t	$V_R= 0V, f=1MHz$			4	pF
Forward dynamic resistance	r_{f1}	$I_F= 3mA, f= 30MHz$			2.5	Ω
	r_{f2}	$I_F= 3mA, f= 30MHz$			3.6	Ω
Reverse recovery time	t_{rr}	$I_F=10mA, V_R=1V$ $I_{rr}= 0.1 \cdot I_R, R_L=100\Omega$			0.2	ms

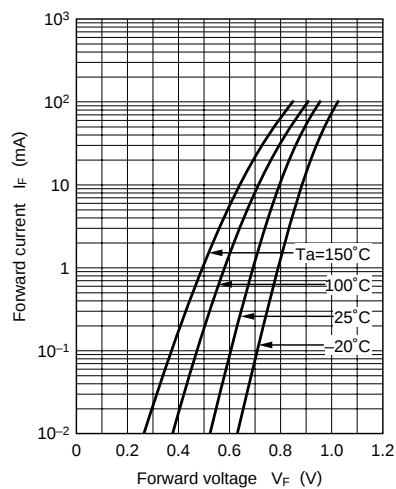
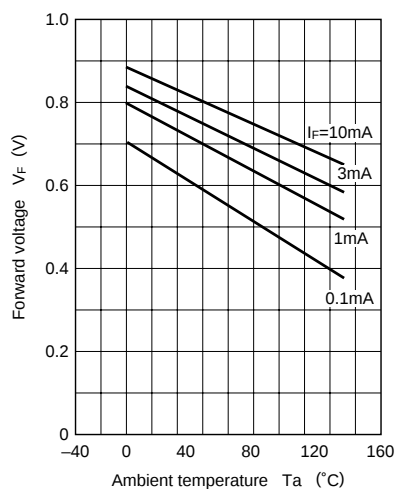
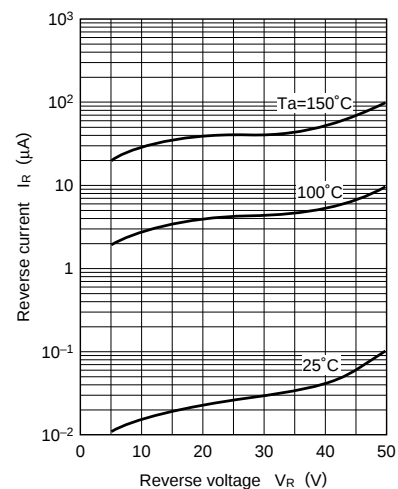
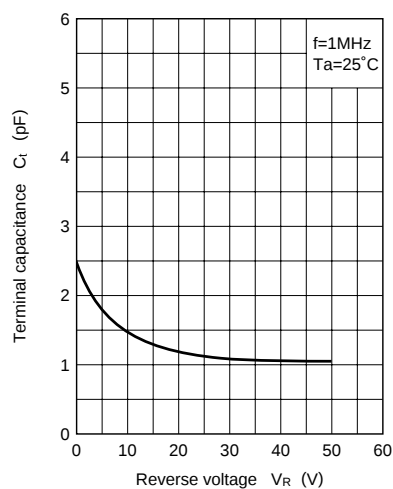
Note 1 : Rated input/output frequency : 2.5MHz

2 : * t_{rr} measuring circuit



■ Cathode Indication

Type No.	MA196	
Color	1st Band	Green
	2nd Band	Green

$I_F - V_F$  $V_F - T_a$  $I_R - V_R$  $C_t - V_R$  $r_f - I_F$ 