

MA195

Silicon epitaxial planer type

For switching circuits

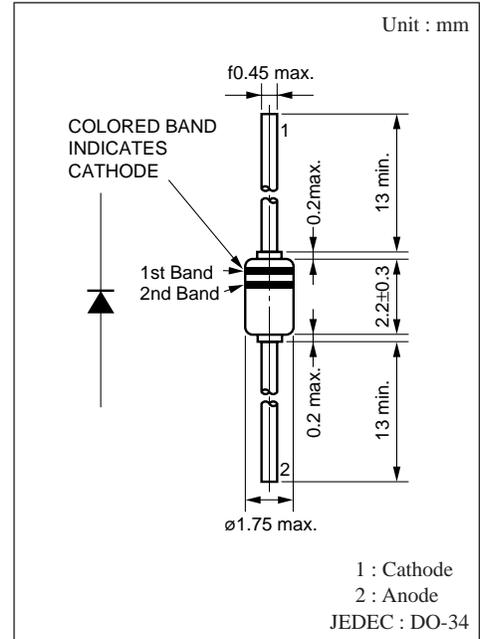
■ Features

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

■ Absolute Maximum Ratings ($T_a=25^\circ\text{C}$)

Parameter	Symbol	Rating	Unit
Reverse voltage (DC)	V_R	35	V
Repetitive peak reverse voltage	V_{RRM}	35	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	$^\circ\text{C}$
Storage temperature	T_{stg}	- 55 to + 200	$^\circ\text{C}$

* $t=1s$

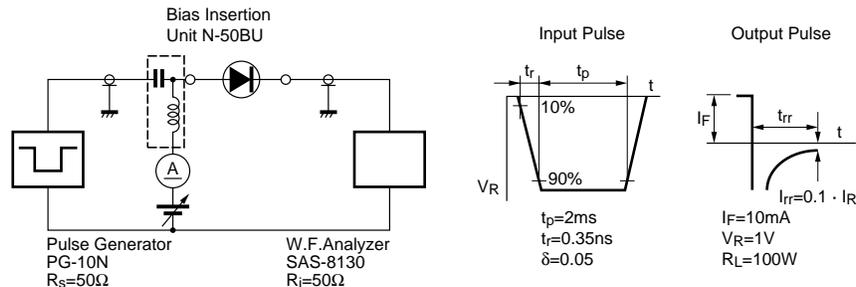


■ Electrical Characteristics ($T_a=25^\circ\text{C}$)

Parameter	Symbol	Condition	min	typ	max	Unit
Reverse current (DC)	I_{R1}	$V_R=15V$			0.005	μA
	I_{R2}	$V_R=30V$			0.01	μA
	I_{R3}	$V_R=35V, T_a=150^\circ\text{C}$			100	μA
Forward voltage (DC)	V_F	$I_F=100\text{mA}$			1.2	V
Reverse voltage (DC)	V_R	$I_R=100\mu\text{A}$	35			V
Terminal capacitance	C_t	$V_R=0V, f=1\text{MHz}$			4	pF
Forward dynamic resistance	r_f	$I_F=3\text{mA}, f=30\text{MHz}$			2.5	Ω
Reverse recovery time	t_{rr}^*	$I_F=10\text{mA}, V_R=1V$ $I_{tr}=0.1 \cdot I_R, R_L=100\Omega$			0.2	ms

Note 1 : Rated input/output frequency : 2.5MHz

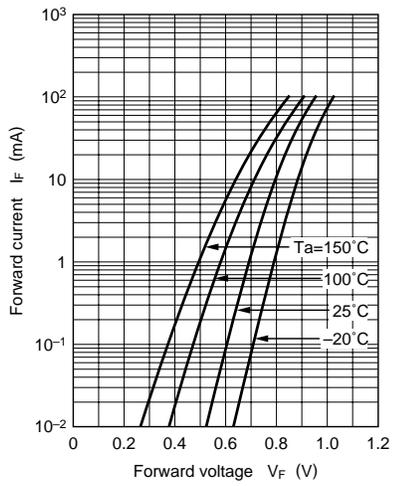
2 : * t_{rr} measuring circuit



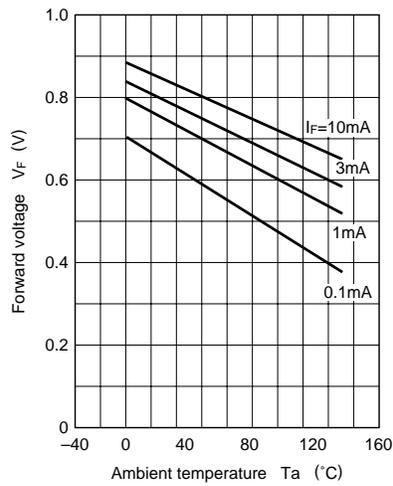
■ Cathode Indication

Type No.	MA195	
Color	1st Band	White
	2nd Band	White

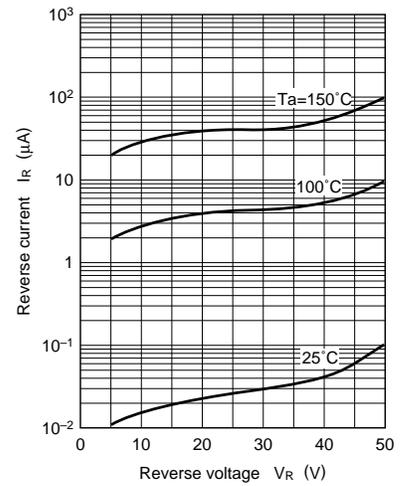
$I_F - V_F$



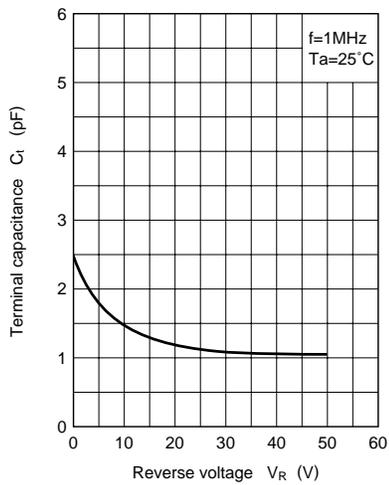
$V_F - T_a$



$I_R - V_R$



$C_t - V_R$



$r_f - I_F$

