

MA3X157A (MA157A)

Silicon epitaxial planar type

For switching circuits

■ Features

- High switching speed
- Small terminal capacitance C_t
- Both chips have even characteristics

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

Parameter	Symbol	Rating	Unit
Reverse voltage	V_R	80	V
Maximum peak reverse voltage	V_{RM}	80	V
Forward current	Single	I_F	100
	Series		65
Peak forward current	Single	I_{FM}	225
	Series		145
Non-repetitive peak forward surge current*	Single	I_{FSM}	500
	Series		325
Junction temperature	T_j	150	$^\circ\text{C}$
Storage temperature	T_{stg}	-55 to +150	$^\circ\text{C}$

Note) *: $t = 1\text{ s}$

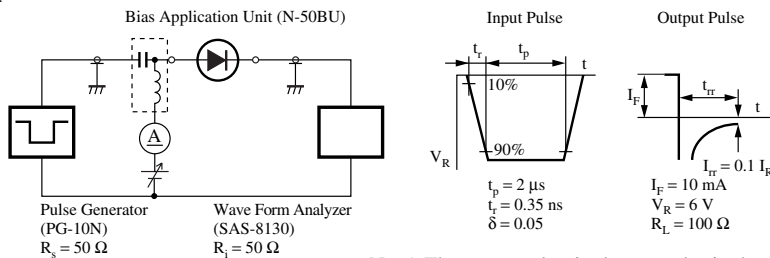
■ Electrical Characteristics $T_a = 25^\circ\text{C} \pm 3^\circ\text{C}$

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Forward voltage	V_F	$I_F = 100\text{ mA}$			1.2	V
Reverse voltage	V_R	$I_R = 100\ \mu\text{A}$	80			V
Reverse current	I_R	$V_R = 75\text{ V}$			100	nA
Terminal capacitance	C_t	$V_R = 0\text{ V}, f = 1\text{ MHz}$			2	pF
Reverse recovery time *	t_{rr}	$I_F = 10\text{ mA}, V_R = 6\text{ V}$ $I_{tr} = 0.1 I_R, R_L = 100\ \Omega$			3	ns

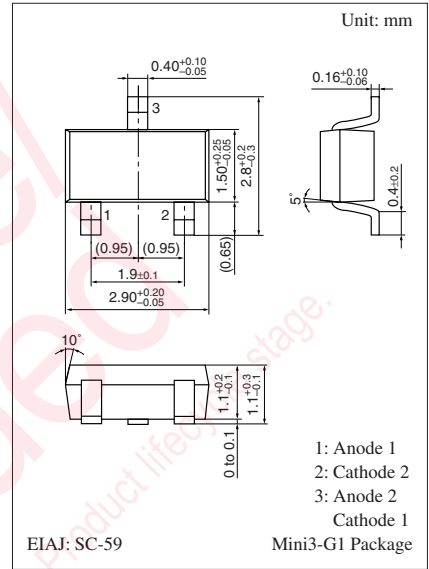
Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7031 measuring methods for diodes.

2. Absolute frequency of input and output is 100 MHz.

3. *: t_{rr} measurement circuit

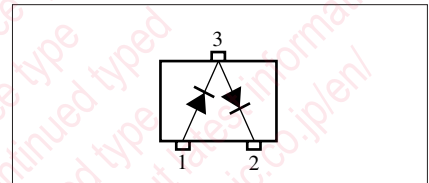


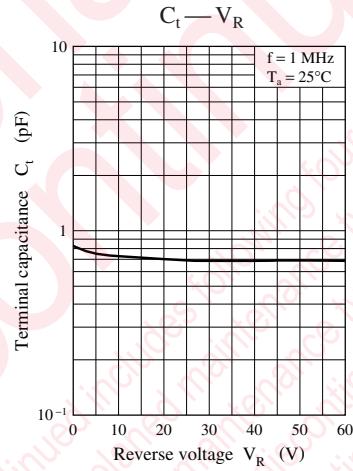
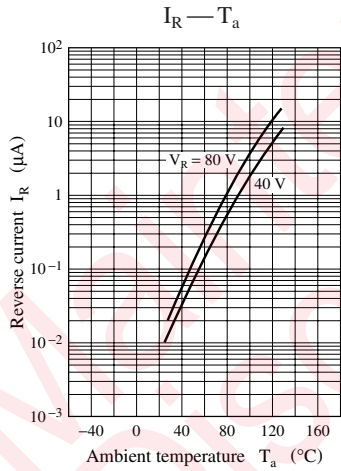
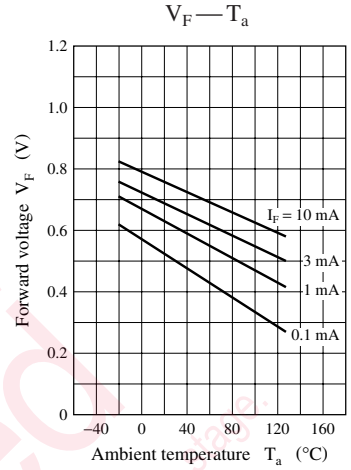
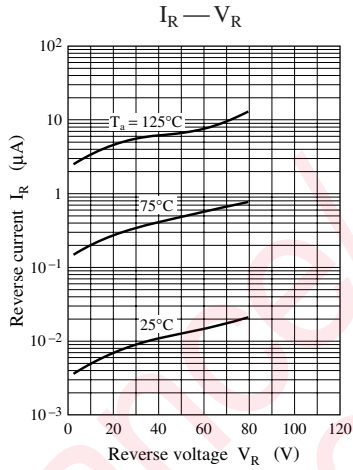
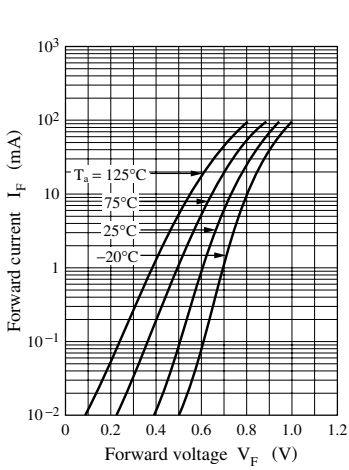
Note) The part number in the parenthesis shows conventional part number.



Marking Symbol: MS

Internal Connection





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