

# MA3X157A (MA157A)

Silicon epitaxial planar type

For switching circuits

### ■ Features

- High switching speed
- Small terminal capacitance,  $C_t$
- Both chips have even characteristics
- Can be connected in series

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

Parameter	Symbol	Rating	Unit
Reverse voltage (DC)	$V_R$	80	V
Peak reverse voltage	$V_{RM}$	80	V
Forward current (DC)	Single	$I_F$	100
	Series		65
Repetitive peak forward current	Single	$I_{FRM}$	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	$^\circ\text{C}$

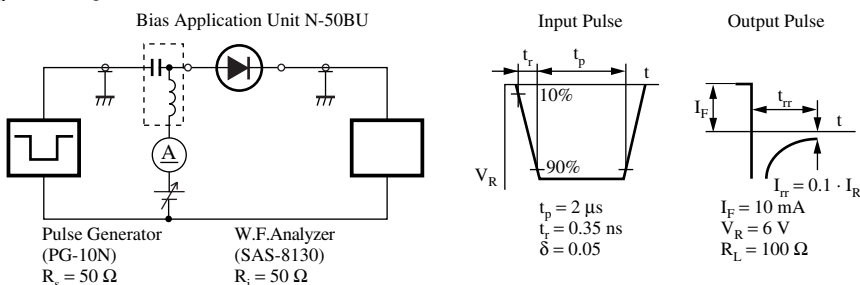
Note) \* :  $t = 1 \text{ s}$

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

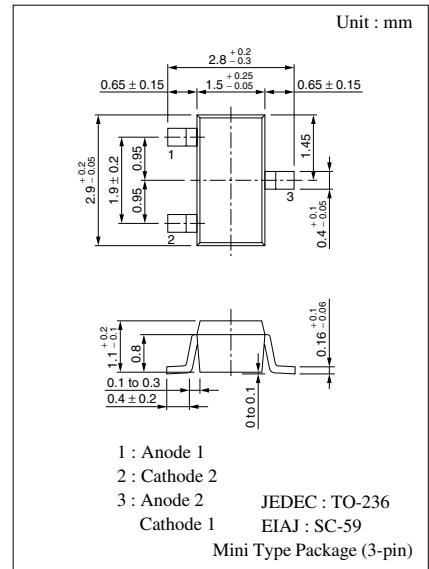
Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Reverse current (DC)	$I_R$	$V_R = 75 \text{ V}$			0.1	$\mu\text{A}$
Forward voltage (DC)	$V_F$	$I_F = 100 \text{ mA}$			1.2	V
Reverse voltage (DC)	$V_R$	$I_R = 100 \mu\text{A}$	80			V
Terminal capacitance	$C_t$	$V_R = 0 \text{ V}, f = 1 \text{ MHz}$			2	pF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

Note) 1. Rated input/output frequency: 100 MHz

2. \* :  $t_{rr}$  measuring circuit

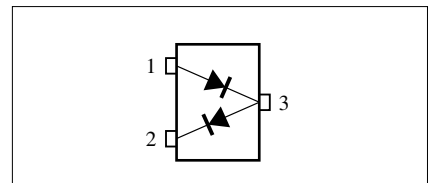


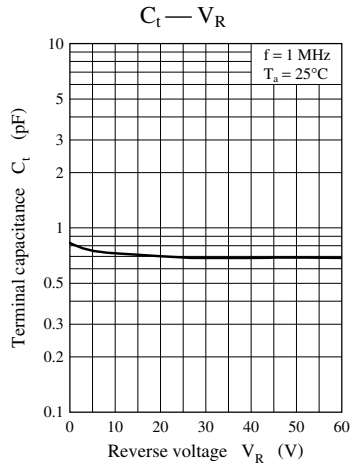
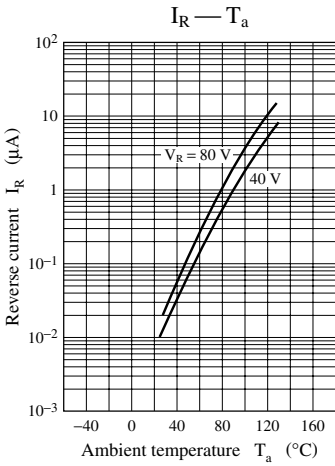
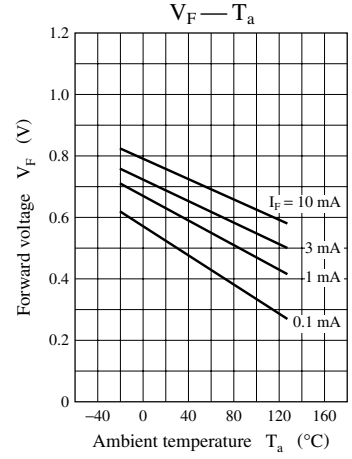
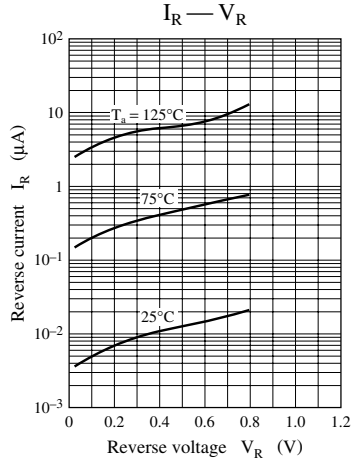
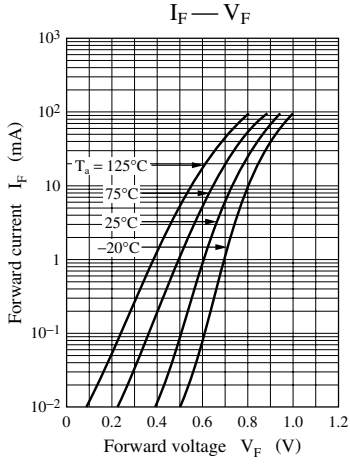
Note) The part number in the parenthesis shows conventional part number.



Marking Symbol: MS

Internal Connection





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