

MA3X716 (MA716)

Silicon epitaxial planar type

For switching
For wave detection

Features

- Two MA3X704A (MA704A) is contained in one package (series connection)
- Low forward voltage V_F , optimum for low voltage rectification
- Optimum for high frequency rectification because of its short reverse recovery time (t_{rr})
- Mini type 3-pin package

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

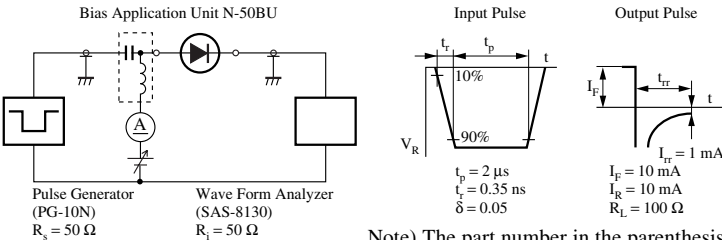
Parameter		Symbol	Rating	Unit
Reverse voltage (DC)		V_R	30	V
Peak forward current	Single	I_{FM}	150	mA
	Series		110	
Forward current (DC)	Single	I_F	30	mA
	Series		20	
Junction temperature		T_j	125	$^{\circ}\text{C}$
Storage temperature		T_{stg}	-55 to +125	$^{\circ}\text{C}$

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

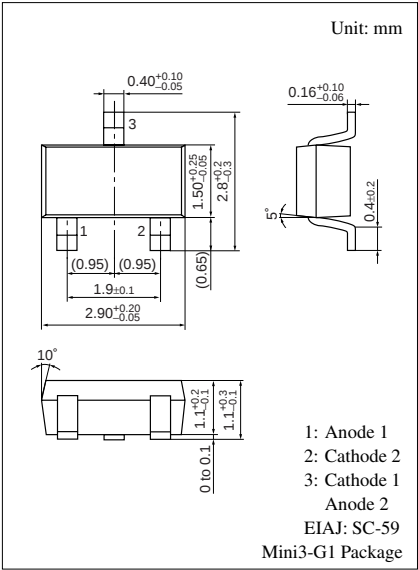
Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Reverse current (DC)	I_R	$V_R = 30\text{ V}$			1	μA
Forward voltage (DC)	V_{F1}	$I_F = 1\text{ mA}$			0.4	V
	V_{F2}	$I_F = 30\text{ mA}$			1.0	
Terminal capacitance	C_t	$V_R = 1\text{ V}, f = 1\text{ MHz}$		1.5		pF
Reverse recovery time *	t_{rr}	$I_F = I_R = 10\text{ mA}$ $I_{rr} = 1\text{ mA}, R_L = 100\ \Omega$		1.0		ns
Detection efficiency	η	$V_{in} = 3\text{ V}_{(peak)}, f = 30\text{ MHz}$ $R_L = 3.9\text{ k}\Omega, C_L = 10\text{ pF}$		65		%

Note) 1. This product is sensitive to electric shock (static electricity, etc.). Due attention must be paid on the charge of a human body and the leakage of current from the operating equipment.

2. Rated input/output frequency: 2 GHz 3. *: t_{rr} measuring instrument

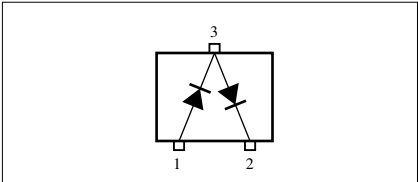


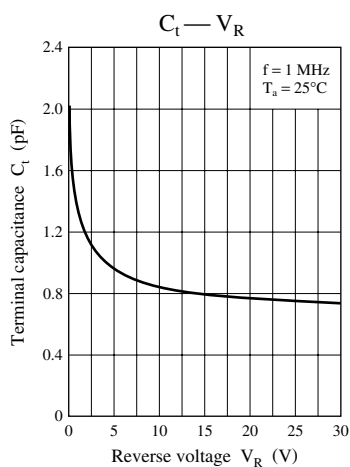
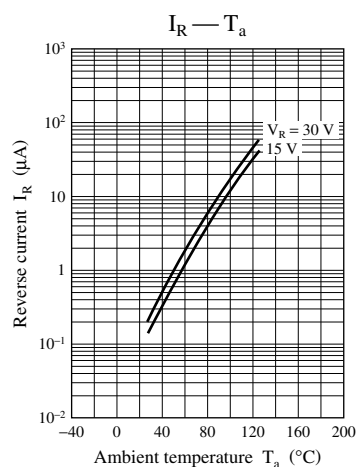
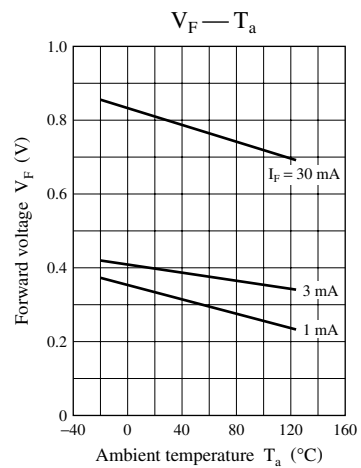
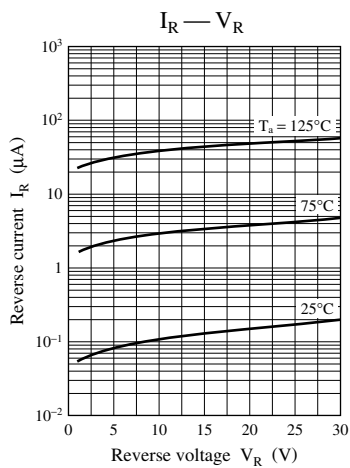
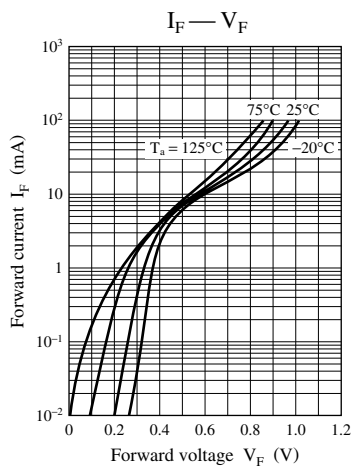
Note) The part number in the parenthesis shows conventional part number.



Marking Symbol: M1U

Internal Connection





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