MA3J742 (MA742)

Silicon epitaxial planar type

For switching

■ Features

- Two MA3X716 (MA716) 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})
- S-Mini type 3-pin package

■ Absolute Maximum Ratings $T_a = 25$ °C

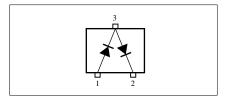
Parameter		Symbol	Rating	Unit
Reverse voltage (DC)		V_R	30	V
Peak reverse voltage		V_{RM}	30	V
Forward current (DC)	Single	I_F	30	mA
	Series *		20	
Peak forward current	Single	I_{FM}	150	mA
	Series *		110	
Junction temperature		T _j	125	°C
Storage temperature		T_{stg}	-55 to +125	°C

Note) *: Value per chip

Unit: mm 0.35-0.1 0.15-0.05 0.05-0.05 0.09±0.1 1: Anode 1 2: Cathode 2 3: Cathode 1 Anode 2 SMini3-F1 Package

Marking Symbol: M1U

Internal Connection



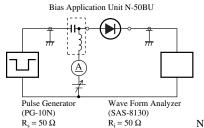
■ Electrical Characteristics $T_a = 25$ °C

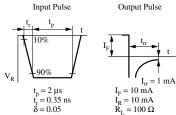
Parameter	Symbol	Conditions	Min	Тур	Max	Unit
Reverse current (DC)	I_R	$V_R = 30 \text{ V}$			1	μΑ
Forward voltage (DC)	V_{F1}	$I_F = 1 \text{ mA}$			0.4	V
	V _{F2}	$I_F = 30 \text{ mA}$			1	
Terminal capacitance	C _t	$V_R = 1 \text{ V, f} = 1 \text{ MHz}$		1.5		pF
Reverse recovery time *	t _{rr}	$I_F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

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.

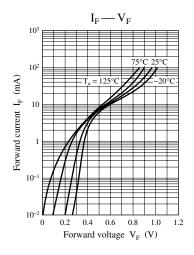
2. Rated input/output frequency: 2 GHz

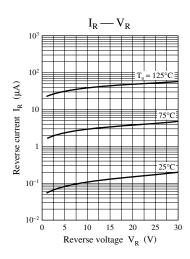
3. *: t_{rr} measuring instrument

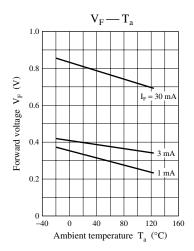


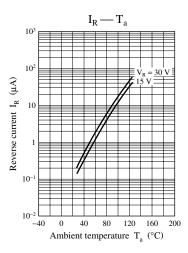


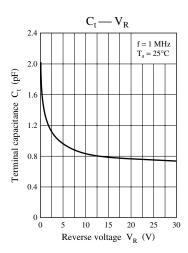
Note) The part number in the parenthesis shows conventional part number.











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