MA3J741D, MA3J741E (MA741WA, MA741WK)

Silicon epitaxial planar type

For switching circuits

■ Features

- Two MA3J741s are contained in one package (S-mini type 3-pin)
- Low forward rise voltage (V_F) and satisfactory wave detection efficiency (η)
- Small temperature coefficient of forward characteristic
- Extremely low reverse current I_R

■ Absolute Maximum Ratings $T_a = 25$ °C

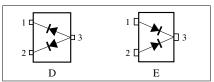
Parameter		Symbol	Rating	Unit
Reverse voltage (DC)		V_R	30	V
Peak reverse voltage		V_{RM}	30	V
Forward current	Single	I_F	30	mA
(DC)	Double*		20	
Peak forward	Single	I_{FM}	150	mA
current	Double*		110	
Junction temperature		T _j	125	°C
Storage temperature		T_{stg}	-55 to +125	°C

Note) * : Value per hcip

EIAJ : SC-70 Flat S-Mini Type Package (3-pin) Unit : mm 2.1 ± 0.1 0.425 1.25 ± 0.1 0.425 WA3J74ID MA3J74IE 1 Cathode 1 Anode 1 2 Cathode 2 Anode 2 3 Anode 1,2 Cathode 1,2

Marking Symbol
• MA3J741D : M2P
• MA3J741E : M2R

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	V
Terminal capacitance	C _t	$V_R = 1 V, f = 1 MHz$		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	η	$V_{in} = 3 V_{(peak)}, f = 30 MHz$		65		%
		$\begin{split} V_{in} &= 3~V_{(peak)},~f = 30~MHz\\ R_L &= 3.9~k\Omega,~C_L = 10~pF \end{split}$				

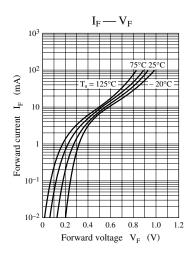
- Note) 1. Schottky barrier diode is sensitive to electric shock (static electricity, etc.). Due attention must be paid on the charge of a human body and the leakage of current from the operating equipment.
 - 2. Rated input/output frequency: 2 000 MHz

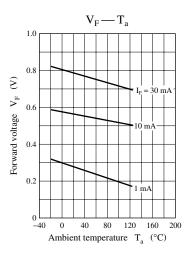
 $\hat{R}_{\cdot} = 50 \, \hat{\Omega}$

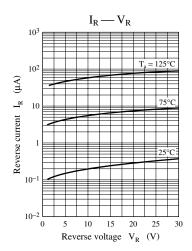
3. *: t_{rr} measuring instrument Bias Application Unit N-50BU Input Pulse Output Pulse V_R Upulse Generator V_R Upulse V_R Upulse Generator V_R Upulse V_R Upulse

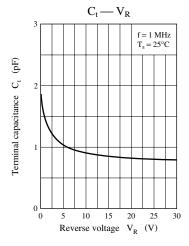
 $\dot{R} = 50 \Omega$

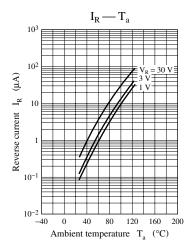
Note) The part number in the parenthesis shows conventional part number.











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