MA3J741D, MA3J741E

Silicon epitaxial planar type

For switching circuits

■ Features

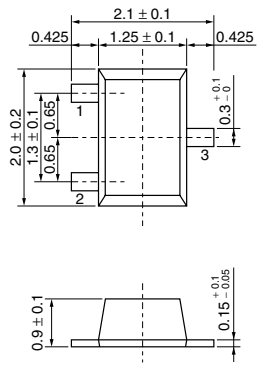
- Two MA3J741s are contained in one package (S-mini type 3-pin)
- Low forward rise voltage (V_F) and satisfactory wave detection efficiency (η)
- Small temperature coefficient of forward characteristic
- Extremely low reverse current I_R

■ 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 (DC)	Single	I_F	30	mA
	Double*		20	
Peak forward current	Single	I_{FM}	150	mA
	Double*		110	
Junction temperature		T_j	125	°C
Storage temperature		T_{stg}	−55 to +125	°C

Note) * : Value per hcip

Unit : mm



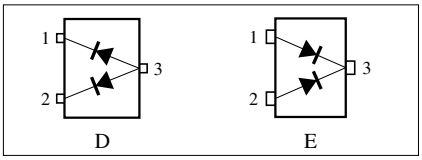
EIAJ : SC-70
Flat S-Mini Type Package
(3-pin)

	MA3J741D	MA3J741E
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



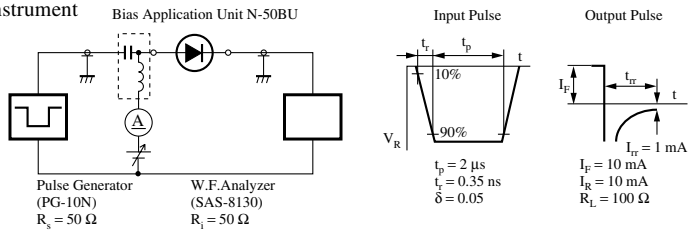
■ Electrical Characteristics $T_a = 25°C$

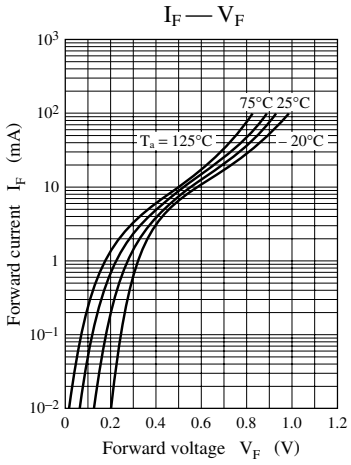
Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Reverse current (DC)	I_R	V_R = 30 V			1	μA
Forward voltage (DC)	V_{F1}	I_F = 1 mA			0.4	V
	V_{F2}	I_F = 30 mA			1	V
Terminal capacitance	C_t	V_R = 1 V, f = 1 MHz		1.5		pF
Reverse recovery time*	t_{rr}	$I_F = I_R$ = 10 mA I_{rr} = 1 mA, R_L = 100 Ω		1		ns
Detection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

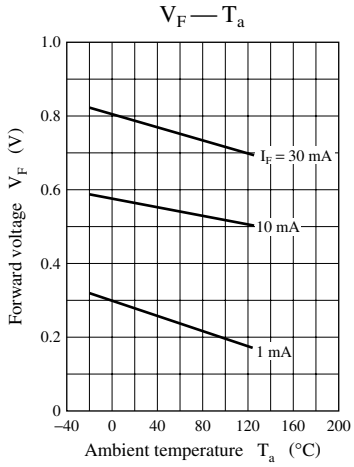
Note) 1. Schottky barrier diode is sensitive to electric shock (static electricity, etc.). Due attention must be paid on the charge of a human body and the leakage of current from the operating equipment.

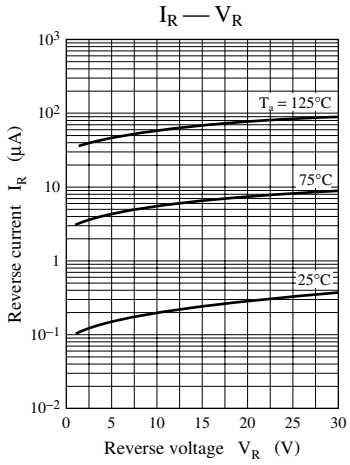
2. Rated input/output frequency: 2 000 MHz

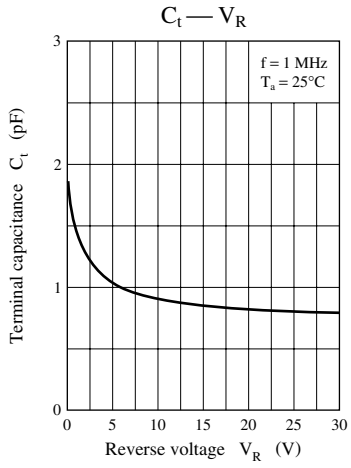
3. * : t_{rr} measuring instrument

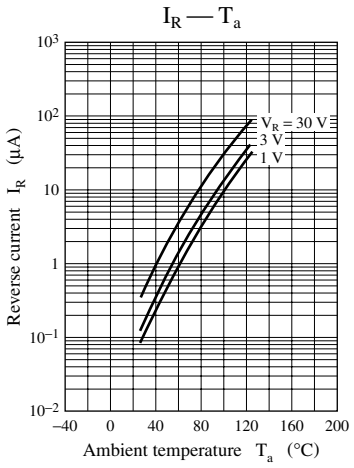



I_F — V_F
Forward current I_F (mA)
Forward voltage V_F (V)
75°C 25°C
T_a = 125°C
−20°C


V_F — T_a
Forward voltage V_F (V)
Ambient temperature T_a (°C)
I_F = 30 mA
10 mA
1 mA


I_R — V_R
Reverse current I_R (μA)
Reverse voltage V_R (V)
T_a = 125°C
75°C
25°C


C_t — V_R
Terminal capacitance C_t (pF)
Reverse voltage V_R (V)
f = 1 MHz
T_a = 25°C


I_R — T_a
Reverse current I_R (μA)
Ambient temperature T_a (°C)
V_R = 30 V
3 V
1 V