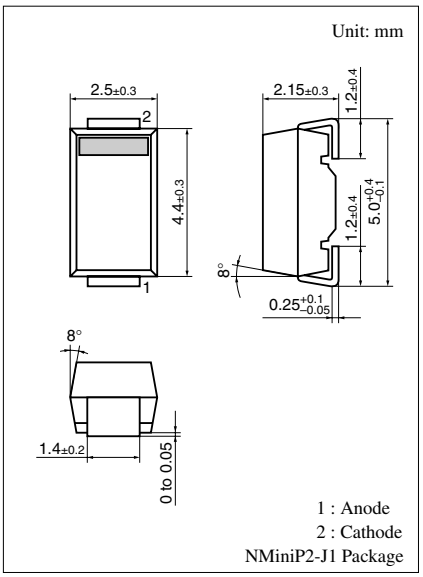
MA2Q705 (MA10705)

Silicon epitaxial planar type

For high frequency rectification



Marking Symbol: PK

■ Features

- $I_{F(AV)}$ = 1.5 A rectification is possible
- Low forward voltage: V_F < 0.37 V (at I_F = 1 A)
- New Mini-power 2-pin package

■ Absolute Maximum Ratings T_a = 25°C

Parameter	Symbol	Rating	Unit
Reverse voltage (DC)	V_R	30	V
Repetitive peak reverse-voltage	V_{RRM}	30	V
Average forward current	$I_{F(AV)}$	1.5	A
Non-repetitive peak forward-surge-current *	I_{FSM}	30	A
Junction temperature	T_j	−40 to +125	°C
Storage temperature	T_{stg}	−40 to +125	°C

Note) ∗: The peak-to-peak value in one cycle of 50 Hz sine wave (non-repetitive)

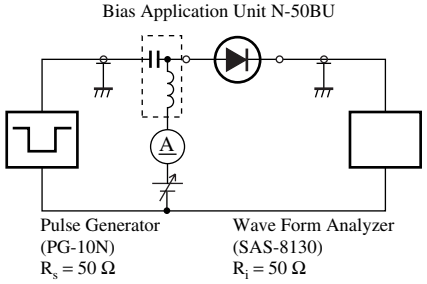
■ Electrical Characteristics T_a = 25°C

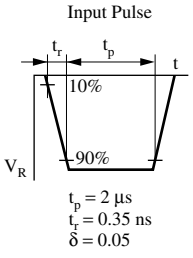
Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Reverse current (DC)	I_R	V_R = 30 V			3	mA
Forward voltage (DC)	V_F	I_F = 1 A			0.37	V
Terminal capacitance	C_t	V_R = 10 V, f = 1 MHz		90		pF
Reverse recovery time *1, 2	t_{rr}	I_F = I_R = 100 mA I_{rr} = 10 mA, R_L = 100 Ω			50	ns

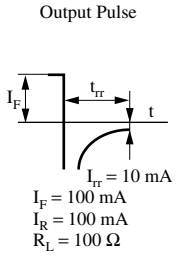
Note) 1. This product is sensitive to electric shock (static electricity, etc.). Due attention must be paid on the charge of a human body and the leakage of current from the operating equipment.

2. Rated input/output frequency: 20 MHz

3. ∗1: Mounted on the printed circuit board (glass epoxy board)
∗2: t_{rr} measuring instrument

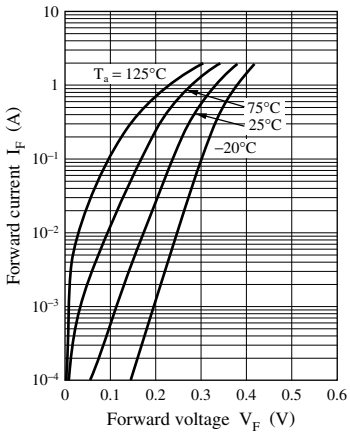




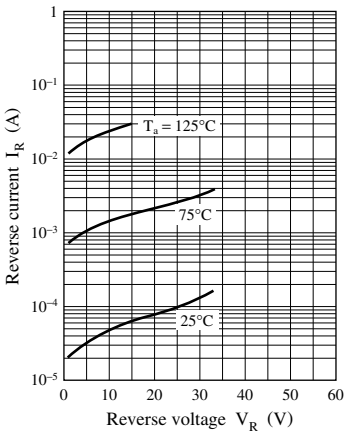


Note) The part number in the parenthesis shows conventional part number.

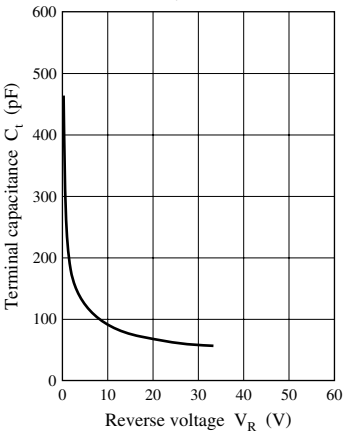
I_F — V_F



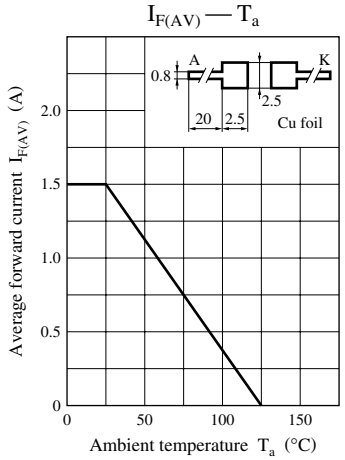
I_R — V_R



C_t — V_R



$I_{F(AV)}$ — T_a



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