

MA2Q737

Silicon epitaxial planar type

For high-frequency rectification

■ Features

- Forward current (average) $I_{F(AV)}$: 1.5 A type
- Reverse voltage (DC value) V_R : 30 V
- Allowing automatic insertion with the emboss taping

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

Parameter	Symbol	Rating	Unit
Reverse voltage (DC)	V_R	30	V
Repetitive peak reverse voltage	V_{RRM}	30	V
Average forward current*1	$I_{F(AV)}$	1.5	A
Non-repetitive peak forward surge current*2	I_{FSM}	60	A
Junction temperature	T_j	-40 to +125	$^\circ\text{C}$
Storage temperature	T_{stg}	-40 to +125	$^\circ\text{C}$

Note) *1: With a printed-circuit board (copper foil area 2.5 mm × 2.5 mm + 0.8 mm × 20 mm or more on both cathode and anode sides)

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

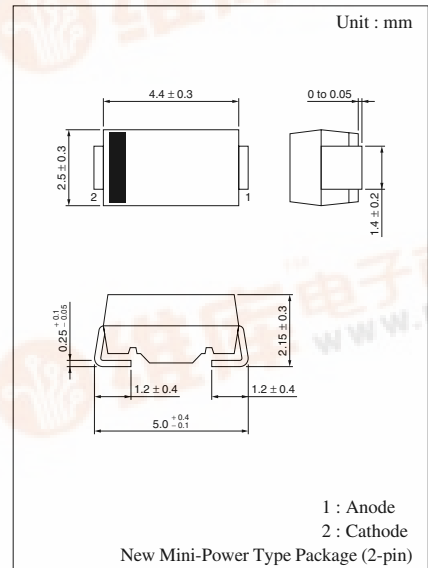
■ Electrical Characteristics $T_a = 25^\circ\text{C}$

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Reverse current (DC)	I_R	$V_R = 30\text{ V}$			1	mA
Forward voltage (DC)	V_F	$I_F = 2\text{ A}$			0.5	V
Terminal capacitance	C_t	$V_R = 10\text{ V}, f = 1\text{ MHz}$		70		pF
Reverse recovery time*	t_{rr}	$I_F = I_R = 100\text{ mA}$ $I_{tr} = 10\text{ mA}, R_L = 100\ \Omega$			50	ns

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.

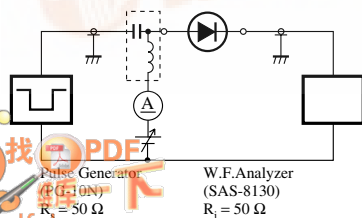
2. Rated input/output frequency: 20 MHz

3. *: t_{rr} measuring instrument

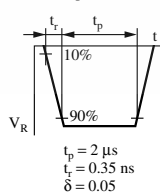


Marking Symbol: PC

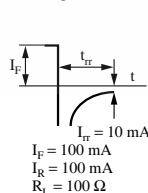
Bias Application Unit N-50BU



Input Pulse

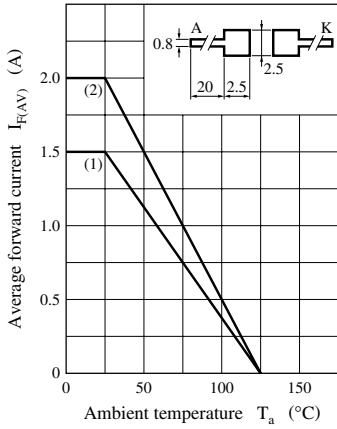


Output Pulse

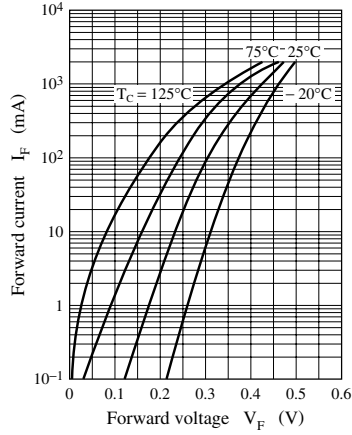


$I_{F(AV)} - T_a$

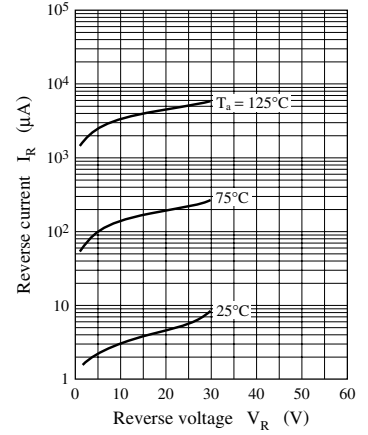
- (1) Printed-circuit board: Glass epoxy board
 - (2) Printed-circuit board: Alumina board
- Copper foil for both A and K sides
2.5 mm × 2.5 mm + 0.8 mm × 20 mm



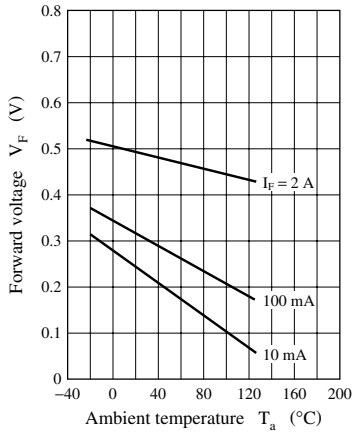
$I_F - V_F$



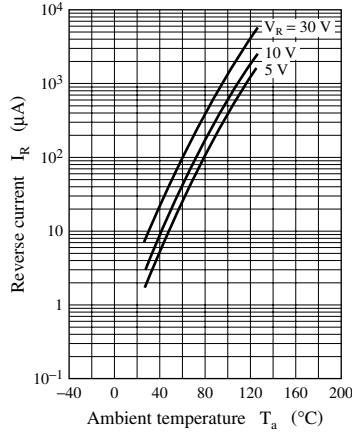
$I_R - V_R$



$V_F - T_a$



$I_R - T_a$



$C_t - V_R$

