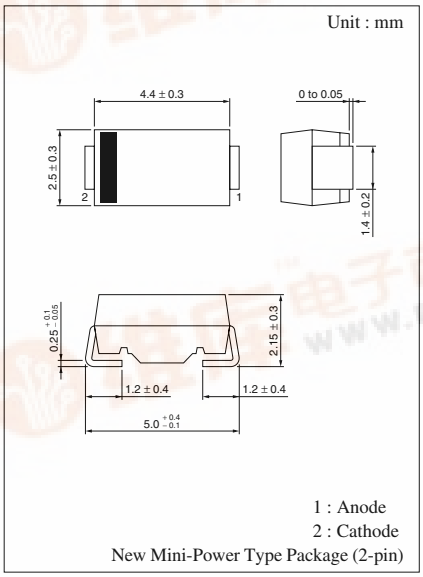
MA2Q738

Silicon epitaxial planar type

For high-frequency rectification



Marking Symbol: PD

■ Features

- Forward current (average) $I_{F(AV)}$: 1.5 A type
- Reverse voltage (DC value) V_R: 40 V
- Allowing automatic insertion with the emboss taping

■ Absolute Maximum Ratings $T_a = 25°C$

Parameter	Symbol	Rating	Unit
Reverse voltage (DC)	V_R	40	V
Repetitive peak reverse voltage	V_{RRM}	40	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	°C
Storage temperature	T_{stg}	−40 to +125	°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)

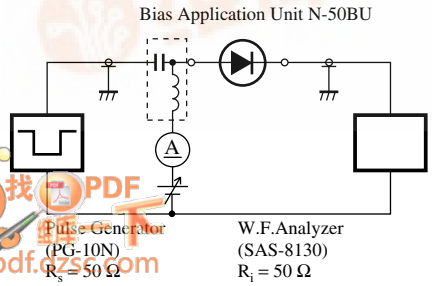
■ Electrical Characteristics $T_a = 25°C$

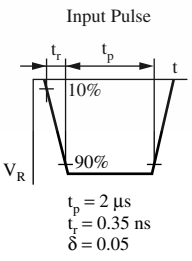
Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Reverse current (DC)	I_R	V_R = 40 V			2	mA
Forward voltage (DC)	V_F	I_F = 2 A			0.55	V
Terminal capacitance	C_t	V_R = 10 V, f = 1 MHz		70		pF
Reverse recovery time*	t_{rr}	$I_F = I_R$ = 100 mA I_{rr} = 10 mA, R_L = 100 Ω			50	ns

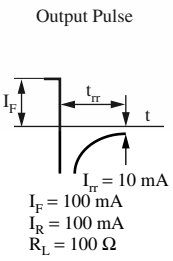
Note) 1. Schottky barrier diode is sensitive to electric shock (static electricity, etc.). Due attention must be paid on the charge of a human body and the leakage of current from the operating equipment.

2. Rated input/output frequency: 20 MHz

3. * : t_{rr} measuring instrument

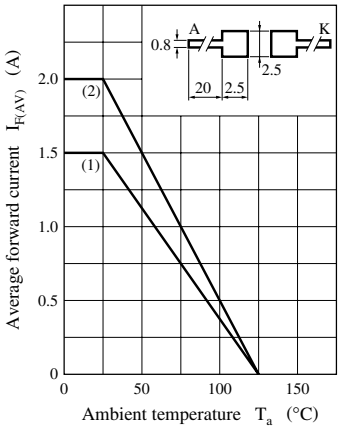




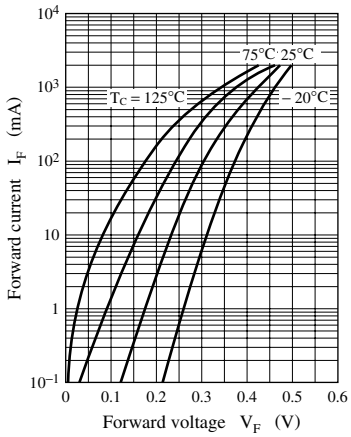


$I_{F(AV)}$ — T_a

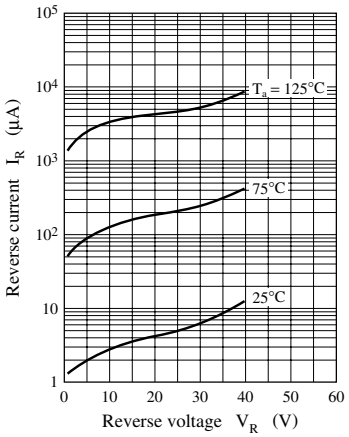
(1) Printed-circuit board: Glass epoxy board
(2) Printed-circuit board: Alumina board
Copper foil for both A and K sides
2.5 mm × 2.5 mm + 0.8 mm × 20 mm



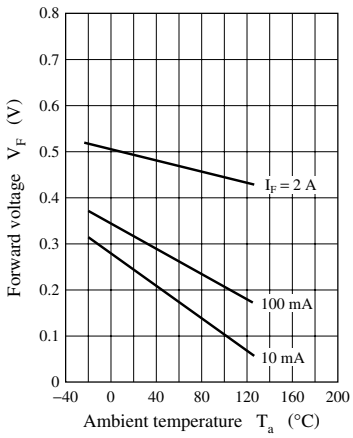
I_F — V_F



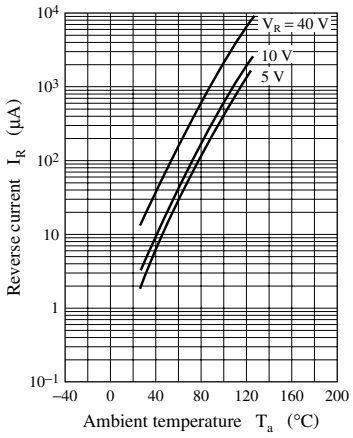
I_R — V_R



V_F — T_a



I_R — T_a



C_t — V_R