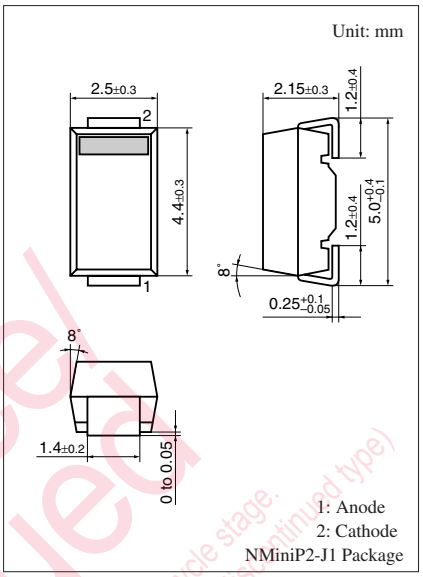
MA2QD01

Silicon epitaxial planar type

For high frequency rectification



Marking Symbol: PL

■ Features

- $I_{F(AV)}$ = 1.5 A rectification is possible
- V_R = 60 V is guaranteed

■ Absolute Maximum Ratings T_a = 25°C

Parameter	Symbol	Rating	Unit
Reverse voltage	V_R	60	V
Maximum peak reverse voltage	V_{RM}	60	V
Forward current (Average) *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)

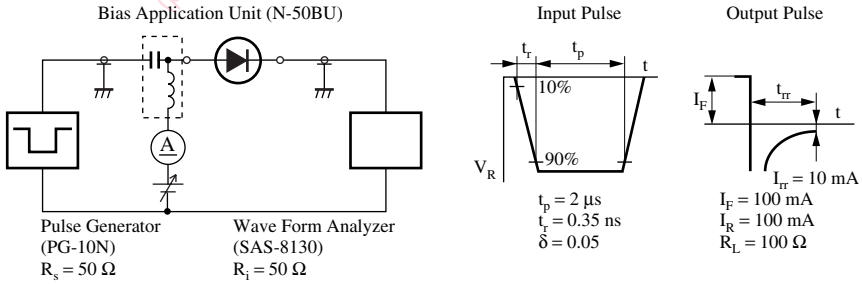
■ Electrical Characteristics T_a = 25°C

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Forward voltage	V_F	I_F = 1.5 A			0.55	V
Reverse current	I_R	V_R = 60 V			1	mA
Terminal capacitance	C_t	V_R = 10 V, f = 1 MHz		110		pF
Reverse recovery time *	t_{rr}	$I_F = I_R$ = 100 mA I_{rr} = 0.1 I_R , R_L = 100 Ω			100	ns

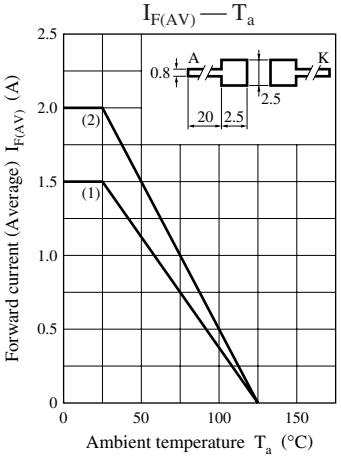
Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7031 measuring methods for diodes.

2. Absolute frequency of input and output is 20 MHz.

3.*: t_{rr} measurement circuit

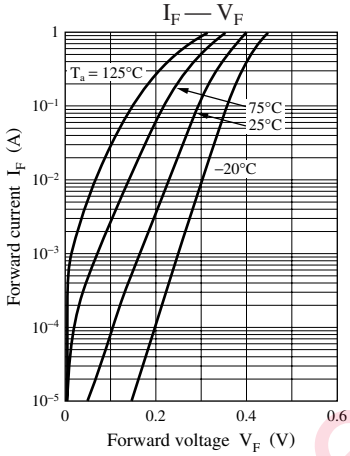


$I_{F(AV)}$ — T_a

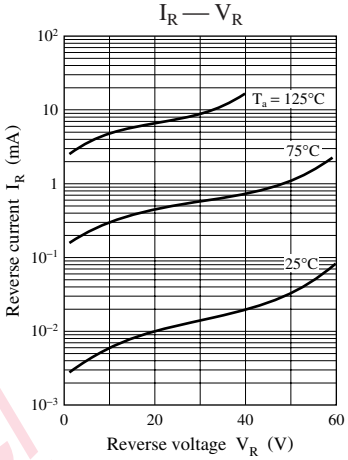


(1) Printed circuit board: Glass epoxy board
(2) Printed circuit board: Alumina board
Copper foil: Both A and K sides
2.5 mm × 2.5 mm + 0.8 mm × 20 mm

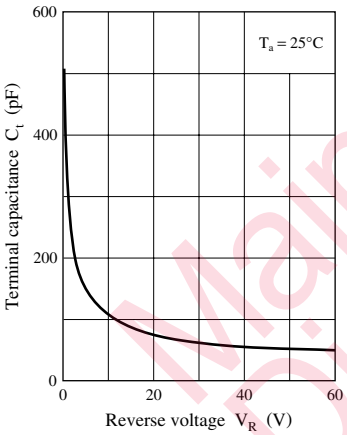
I_F — V_F



I_R — V_R



C_t — V_R



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