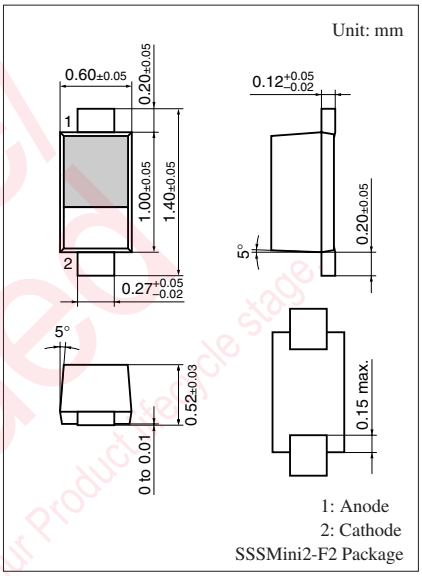
MA27D27

Silicon epitaxial planar type

For super high speed switching



Marking Symbol: 8L

■ Features

- Small reverse current I_R
- Optimum for high frequency rectification because of its short reverse recovery time t_{rr}
- SSS-Mini type 2-pin package

■ Absolute Maximum Ratings $T_a = 25°C$

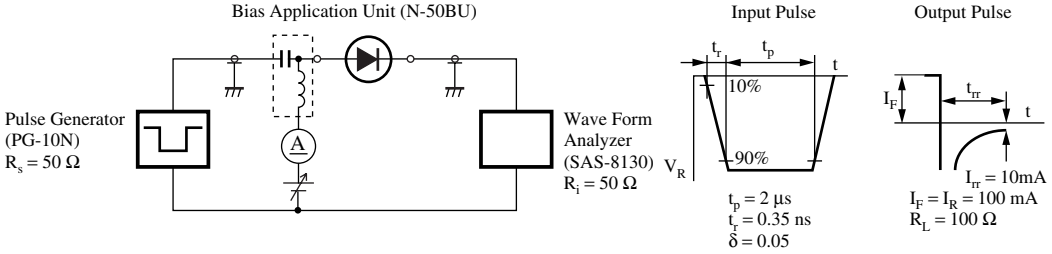
Parameter	Symbol	Rating	Unit
Reverse voltage	V_R	20	V
Repetitive peak reverse voltage	V_{RRM}	20	V
Forward current (Average)	$I_{F(AV)}$	100	mA
Peak forward current	I_{FM}	200	mA
Non-repetitive peak forward surge current *	I_{FSM}	1	A
Junction temperature	T_j	150	°C
Storage temperature	T_{stg}	−55 to +150	°C

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

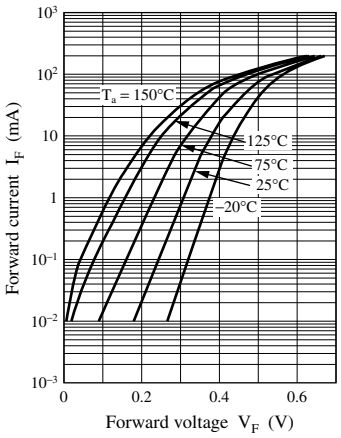
■ Electrical Characteristics $T_a = 25°C \pm 3°C$

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Forward voltage	V_{F1}	I_F = 10 mA		0.38	0.44	V
	V_{F2}	I_F = 100 mA		0.54	0.58	
Reverse current	I_R	V_R = 10 V			0.3	μA
Terminal capacitance	C_t	V_R = 0 V, f = 1 MHz		11		pF
Reverse recovery time *	t_{rr}	$I_F = I_R$ = 100 mA, I_{rr} = 10 mA, R_L = 100 Ω		1		ns

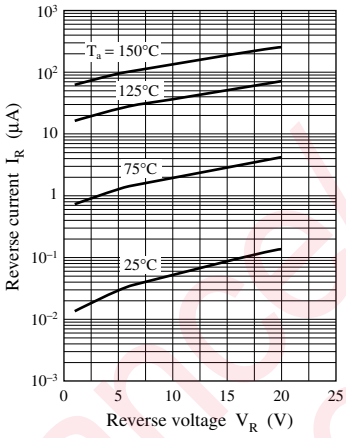
Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7031 measuring methods for diodes.
2. This product is sensitive to electric shock (static electricity, etc.). Due attention must be paid on the charge of a human body and the leakage of current from the operating equipment.
3. Rated input/output frequency: 250 MHz
4. * : t_{rr} measurement circuit



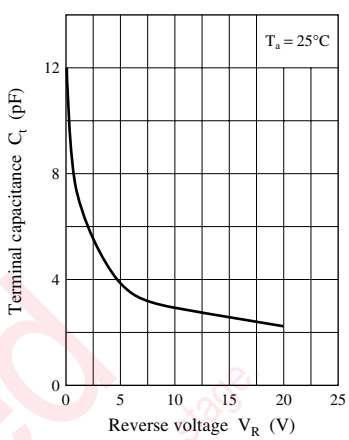
I_F — V_F



I_R — V_R



C_t — V_R



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