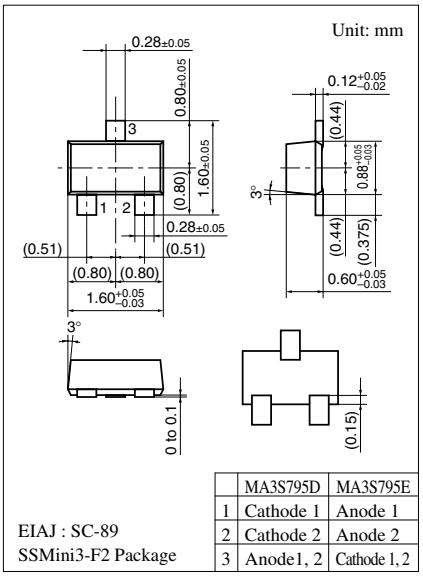
MA3S795D, MA3S795E (MA795WA, MA795WK)

Silicon epitaxial planar type

For switching

■ Features

- High-density mounting is possible
- Low forward voltage V_F , optimum for low voltage rectification: $V_F < 0.3$ V (at $I_F = 1$ mA)
- Optimum for high frequency rectification because of its short reverse recovery time (t_{rr})
- SS-Mini type 3-pin package

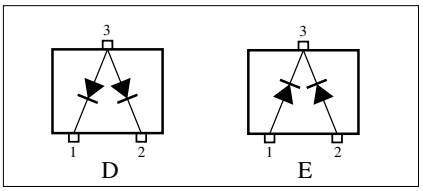


	MA3S795D	MA3S795E
1	Cathode 1	Anode 1
2	Cathode 2	Anode 2
3	Anode1, 2	Cathode 1, 2

Marking Symbol

- MA3S795D: M3D
- MA3S795E: M3D

Internal Connection



■ Absolute Maximum Ratings $T_a = 25°C$

Parameter		Symbol	Rating	Unit
Reverse voltage (DC)		V_R	30	V
Peak reverse voltage		V_{RM}	30	V
Peak forward current	Series	I_{FM}	150	mA
	Double *		110	
Forward current (DC)	Series	I_F	30	mA
	Double *		20	
Junction temperature		T_j	125	°C
Storage temperature		T_{stg}	−55 to +125	°C

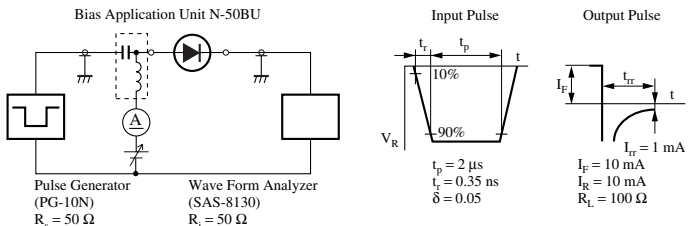
Note) ∗: Value per chip

■ Electrical Characteristics $T_a = 25°C$

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Reverse current (DC)	I_R	$V_R = 30$ V			30	μA
Forward voltage (DC)	V_{F1}	$I_F = 1$ mA			0.3	V
	V_{F2}	$I_F = 30$ mA			1	
Terminal capacitance	C_t	$V_R = 1$ V, f = 1 MHz		1.5		pF
Reverse recovery time *	t_{rr}	$I_F = I_R = 10$ mA $I_{rr} = 1$ mA, $R_L = 100$ Ω		1		ns
Detection efficiency	η	$V_{in} = 3\ V_{(peak)}$, f = 30 MHz $R_L = 3.9$ kΩ, $C_L = 10$ pF		65		%

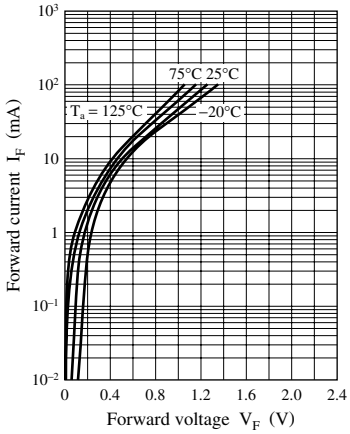
Note) 1. This product is sensitive to electric shock (static electricity, etc.). Due attention must be paid on the charge of a human body and the leakage of current from the operating equipment.

2. Rated input/output frequency: 2 GHz 3. ∗: t_{rr} measuring instrument

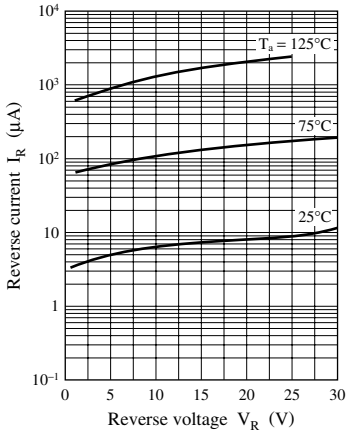


Note) The part number in the parenthesis shows conventional part number.

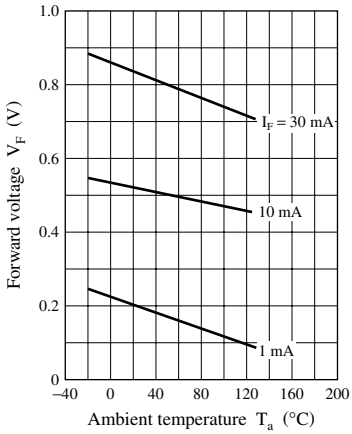
I_F — V_F



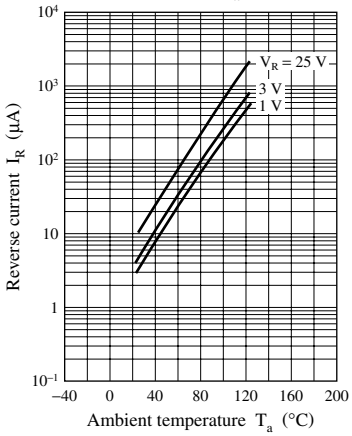
I_R — V_R



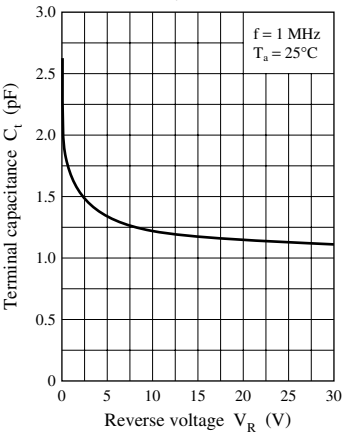
V_F — T_a



I_R — T_a



C_t — V_R



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