

# MA3S133 (MA133)

Silicon epitaxial planar type

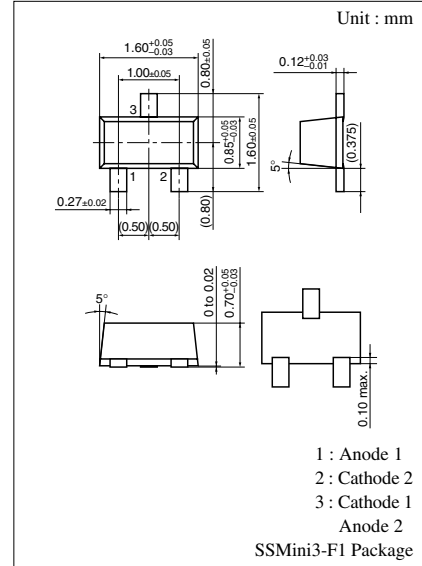
For switching circuits

### ■ Features

- Super-small SS-mini type package contained two elements, allowing high-density mounting
- Two diodes are connected in series in the package

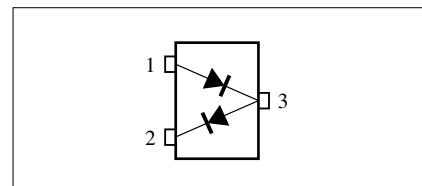
### ■ Absolute Maximum Ratings $T_a = 25^\circ\text{C}$

Parameter	Symbol	Rating	Unit	
Reverse voltage (DC)	$V_R$	80	V	
Peak reverse voltage	$V_{RM}$	80	V	
Forward current (DC)	Single	$I_F$	100	mA
	Series		65	
Peak forward current	Single	$I_{FM}$	200	mA
	Series		130	
Junction temperature	$T_j$	150	$^\circ\text{C}$	
Storage temperature	$T_{stg}$	-55 to +150	$^\circ\text{C}$	



Marking Symbol: MP

Internal Connection



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

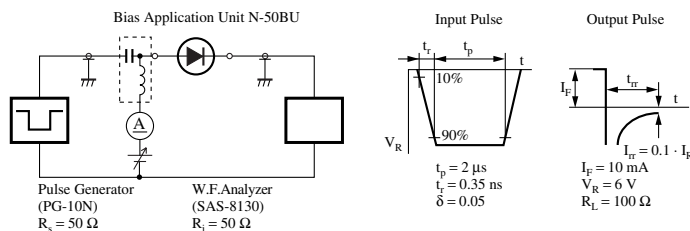
Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Reverse current (DC)	$I_R$	$V_R = 75\text{ V}$			100	nA
Forward voltage (DC)	$V_F$	$I_F = 100\text{ mA}$			1.2	V
Reverse voltage (DC)	$V_R$	$I_R = 100\ \mu\text{A}$	80			V
Terminal capacitance	$C_t^{*1}$	$V_R = 0\text{ V}, f = 1\text{ MHz}$			5.5	pF
	$C_t^{*2}$	$V_R = 0\text{ V}, f = 1\text{ MHz}$			3.0	pF
Reverse recovery time <sup>*3</sup>	$t_{rr}^{*1}$	$I_F = 10\text{ mA}, V_R = 6\text{ V}$ $I_{rr} = 0.1 \cdot I_R, R_L = 100\ \Omega$		150		ns
	$t_{rr}^{*2}$	$I_F = 10\text{ mA}, V_R = 6\text{ V}$ $I_{rr} = 0.1 \cdot I_R, R_L = 100\ \Omega$		9		ns

Note) 1. Rated input/output frequency: 100 MHz

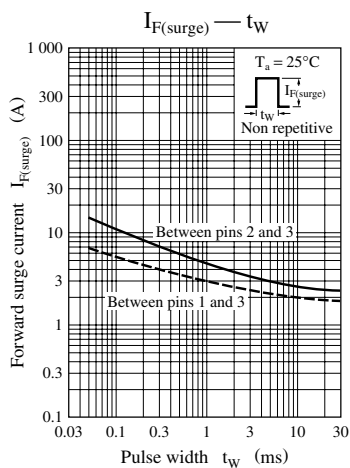
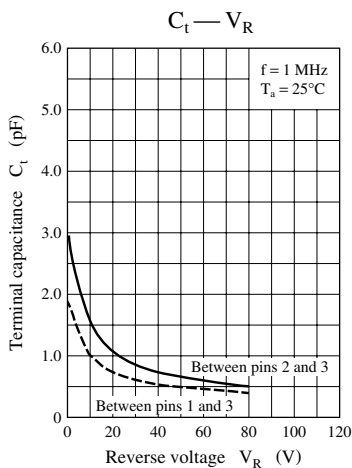
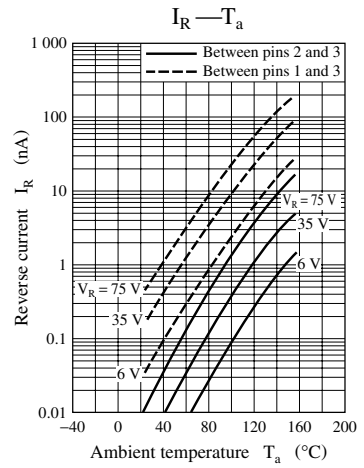
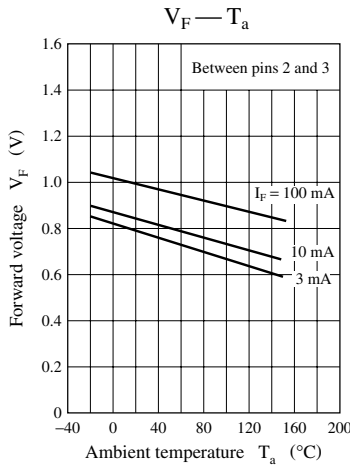
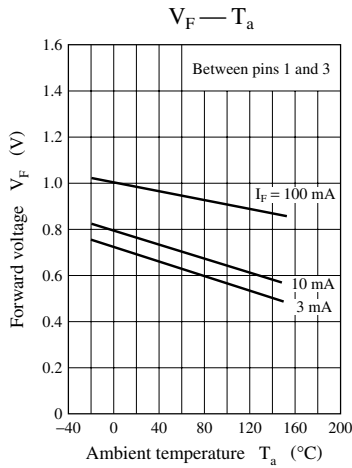
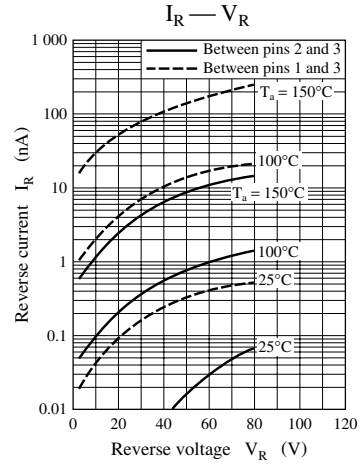
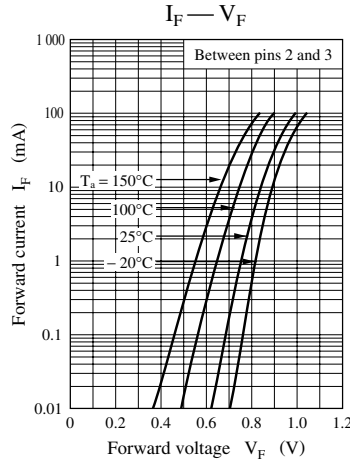
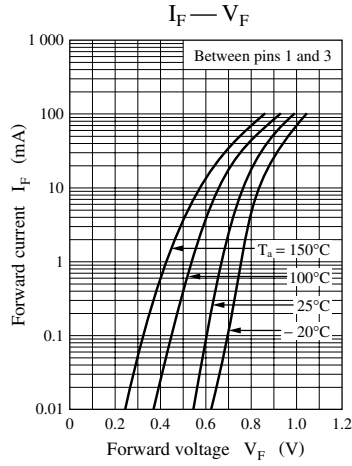
2. \*1 : Between pins 2 and 3

\*2 : Between pins 1 and 3

\*3 :  $t_{rr}$  measuring circuit



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



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