MA3X153, MA3X153A (MA153, MA153A)

Silicon epitaxial planar type

For switching circuits

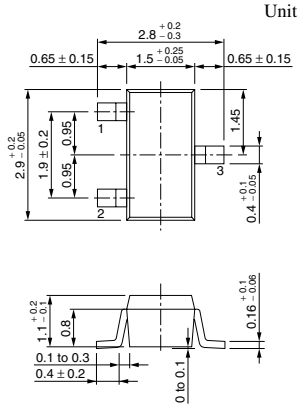
■ Features

- Small terminal capacitance, C_t
- Two diodes are connected in series in the package

■ Absolute Maximum Ratings $T_a = 25°C$

Parameter		Symbol	Rating	Unit
Reverse voltage (DC)	MA3X153	V_R	40	V
	MA3X153A		80	
Peak reverse voltage	MA3X153	V_{RM}	40	V
	MA3X153A		80	
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	°C
Storage temperature		T_{stg}	−55 to +150	°C

Unit : mm

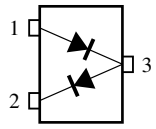


1 : Anode 1
2 : Cathode 2
3 : Anode 2 JEDEC : TO-236
Cathode 1 EIAJ : SC-59
Mini Type Package (3-pin)

Marking Symbol

- MA3X153 : MC
- MA3X153A : MP

Internal Connection



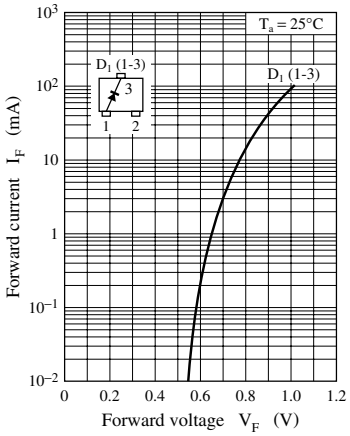
■ Electrical Characteristics $T_a = 25°C$

Parameter		Symbol	Conditions	Min	Typ	Max	Unit
Reverse current (DC)	MA3X153	I_R	V_R = 40 V			0.1	μA
	MA3X153A		V_R = 75 V			0.1	
Forward voltage (DC)		V_F	I_F = 100 mA			1.2	V
Reverse voltage (DC)	MA3X153	V_R	I_R = 100 μA	40			V
	MA3X153A			80			
Terminal capacitance		C_t	V_R = 0 V, f = 1 MHz			5	pF
Reverse recovery time		t_{rr} *1	I_F = 10 mA, V_R = 6 V I_{rr} = 0.1 · I_R, R_L = 100 Ω		150		ns
		t_{rr1} *2	I_F = 10 mA, V_R = 6 V I_{rr} = 0.1 · I_R, R_L = 100 Ω		9		ns

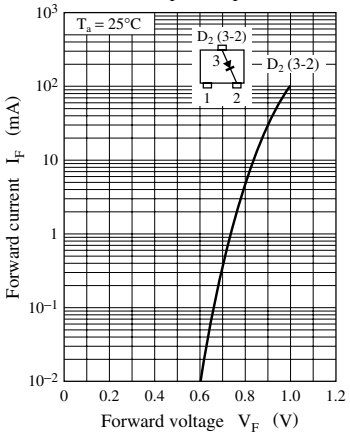
Note) 1. Rated input/output frequency: 100 MHz
2. *1 : Between pins 2 and 3
*2 : Between pins 1 and 3

Note) The part numbers in the parenthesis show conventional part number.

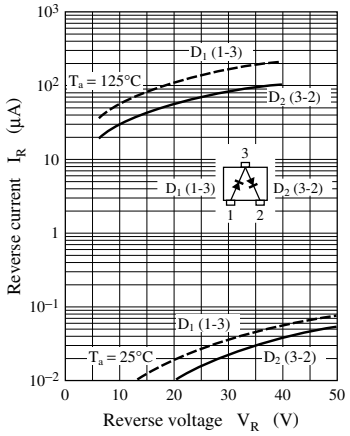
I_F — V_F



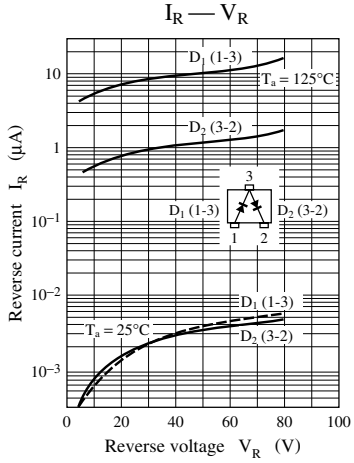
I_F — V_F



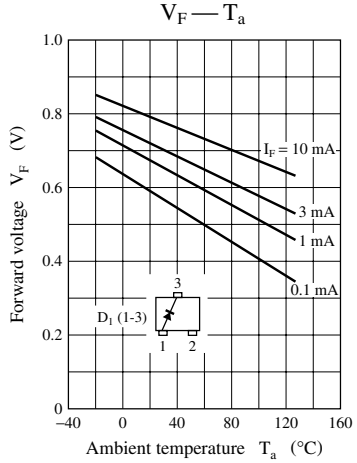
I_R — V_R



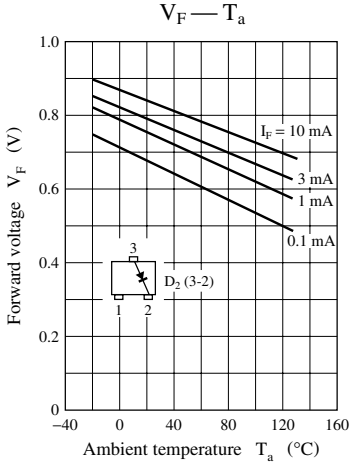
I_R — V_R



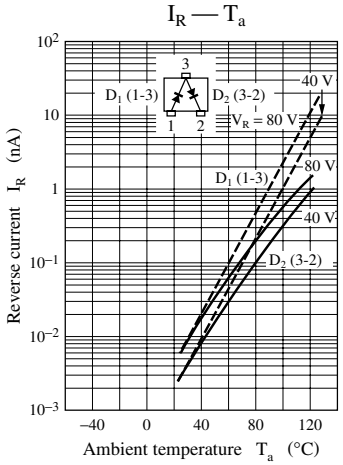
V_F — T_a



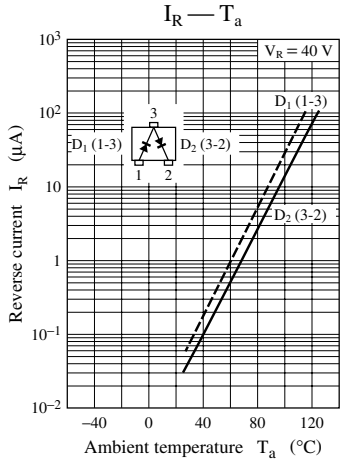
V_F — T_a



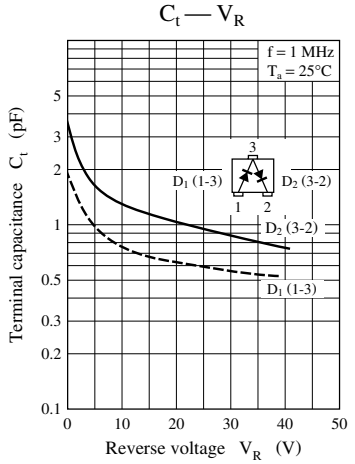
I_R — T_a



I_R — T_a



C_t — V_R



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