MA3X153 (MA153), MA3X153A (MA153A)

Silicon epitaxial planar type

For switching circuits

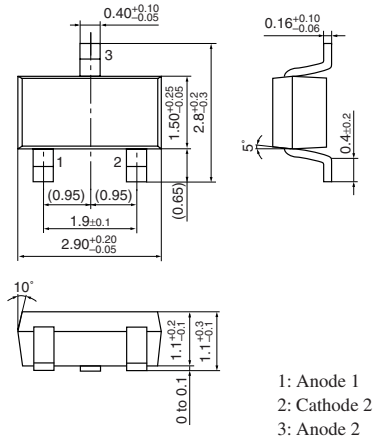
■ Features

- 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	MA3X153	V_R	40	V
	MA3X153A		80	
Maximum peak reverse voltage	MA3X153	V_{RM}	40	V
	MA3X153A		80	
Forward current	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



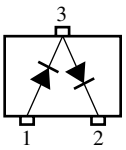
1: Anode 1
2: Cathode 2
3: Anode 2
Cathode 1

EIAJ: SC-59 Mini3-G1 Package

Marking Symbol

- MA3X153: MC
- MA3X153A: MP

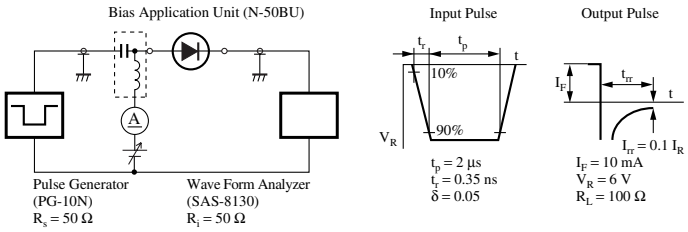
Internal Connection



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

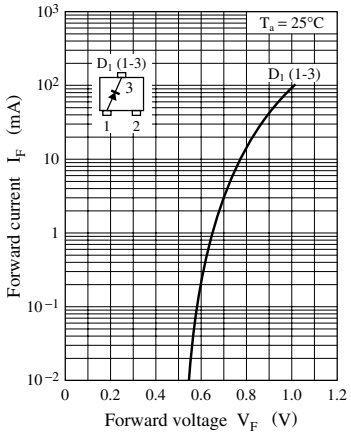
Parameter		Symbol	Conditions	Min	Typ	Max	Unit
Forward voltage		V_F	I_F = 100 mA			1.2	V
Reverse voltage	MA3X153	V_R	I_R = 100 µA	40			V
	MA3X153A			80			
Reverse current	MA3X153	I_R	V_R = 40 V			100	nA
	MA3X153A		V_R = 75 V			100	
Terminal capacitance		C_t	V_R = 0 V, f = 1 MHz			5.0	pF
Reverse recovery time *3		t_{rr} *1	I_F = 10 mA, V_R = 6 V		150		ns
		t_{rr} *2	I_{rr} = 0.1 I_R, R_L = 100 Ω		9		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 100 MHz.
3. *1: Between pins 2 and 3
*2: Between pins 1 and 3
*3: t_{rr} measurement circuit

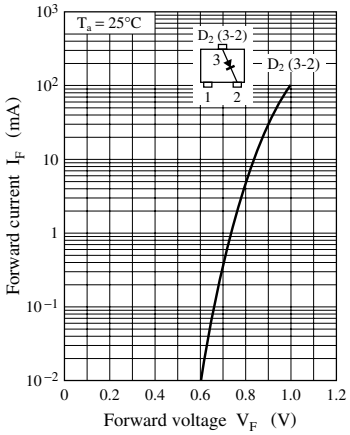


Note) The part numbers in the parenthesis show conventional part number.

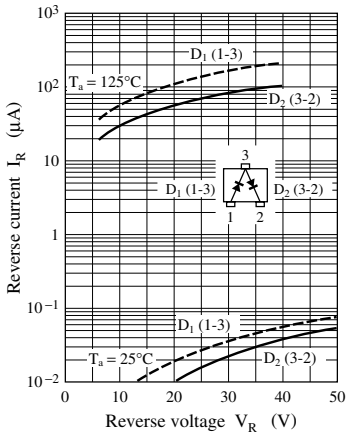
I_F — V_F



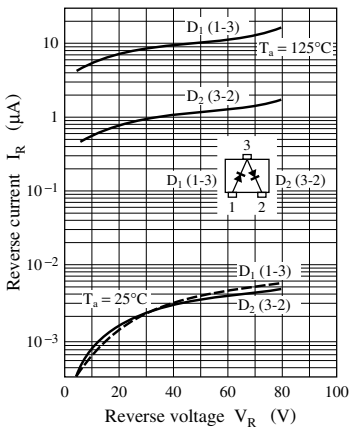
I_F — V_F



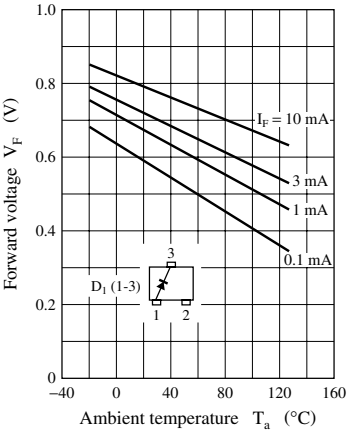
I_R — V_R



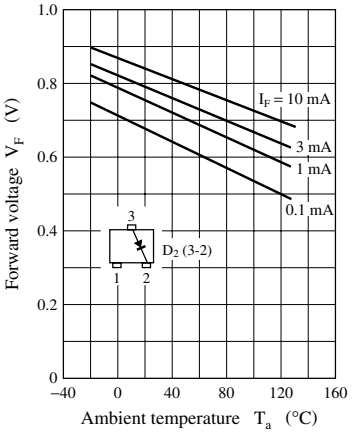
I_R — V_R



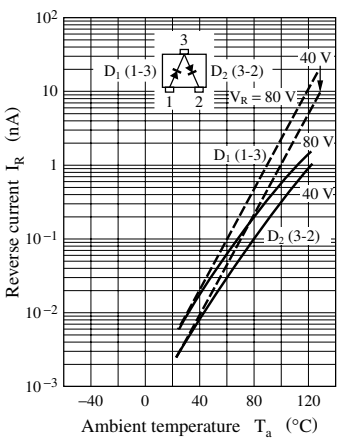
V_F — T_a



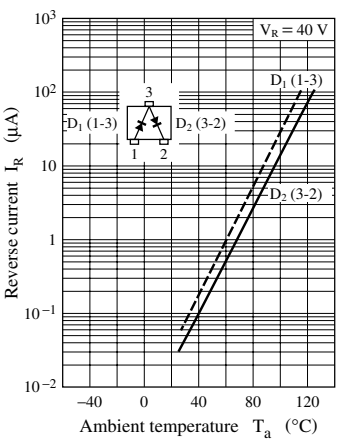
V_F — T_a



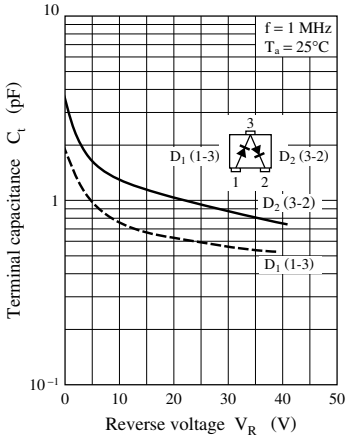
I_R — T_a



I_R — T_a



C_t — V_R



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