

MA3X153, MA3X153A (MA153, MA153A)

Silicon epitaxial planar type

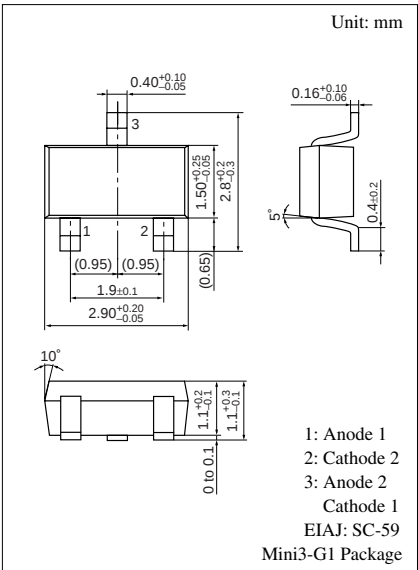
For switching circuits

■ Features

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

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

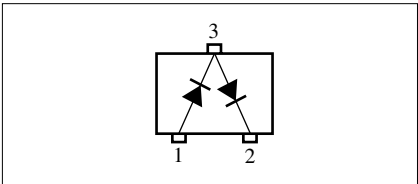
Parameter		Symbol	Rating	Unit
Reverse voltage (DC)	MA3X153	V_R	40	V
	MA3X153A		80	
Peak reverse voltage	MA3X153	V_{RM}	40	V
	MA3X153A		80	
Forward current (DC)	Single	I_F	100	mA
	Series		65	
Peak forward current	Single	I_{FM}	200	mA
	Series		130	
Junction temperature		T_j	150	°C
Storage temperature		T_{stg}	−55 to +150	°C



Marking Symbol

- MA3X153 : MC
- MA3X153A: MP

Internal Connection



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

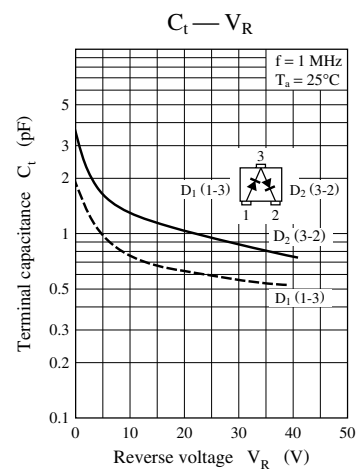
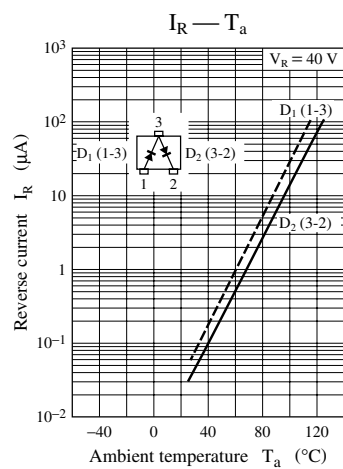
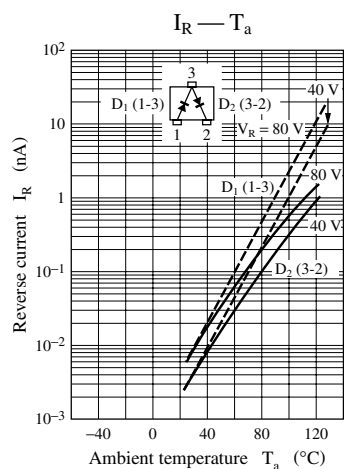
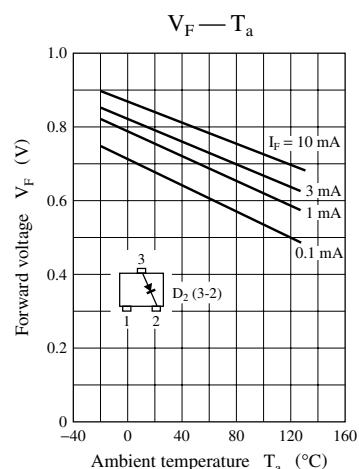
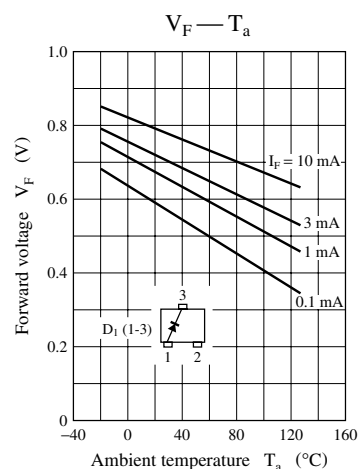
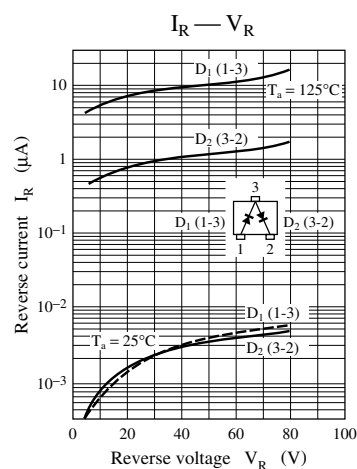
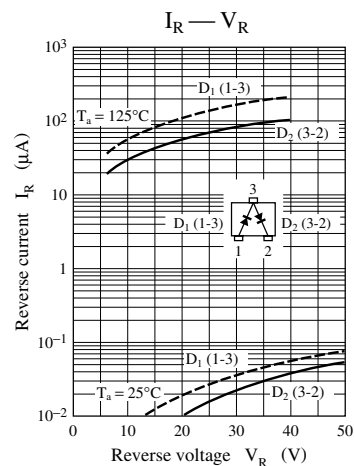
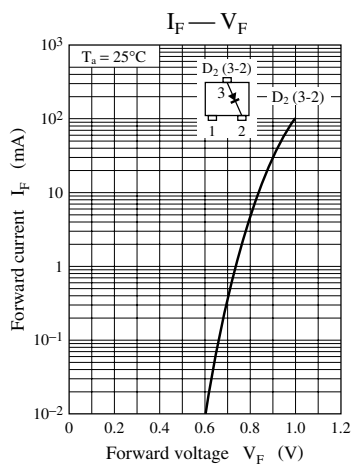
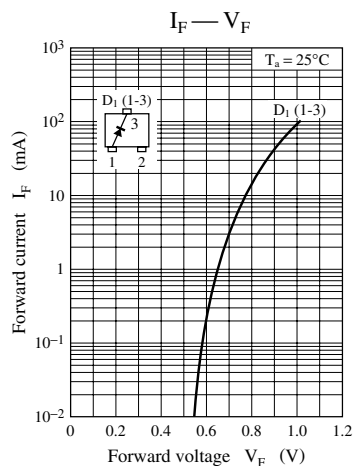
Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Reverse current (DC)	MA3X153	I_R	$V_R = 40 \text{ V}$		0.1	μA
	MA3X153A		$V_R = 75 \text{ V}$		0.1	
Forward voltage (DC)	V_F	$I_F = 100 \text{ mA}$			1.2	V
Reverse voltage (DC)	MA3X153	V_R	$I_R = 100 \mu\text{A}$	40		V
	MA3X153A			80		
Terminal capacitance	C_t	$V_R = 0 \text{ V}, f = 1 \text{ MHz}$			5	pF
Reverse recovery time	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_{rr1}^{*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

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



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