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# MA3X153 (MA153), MA3X153A (MA153A)

Silicon epitaxial planar type

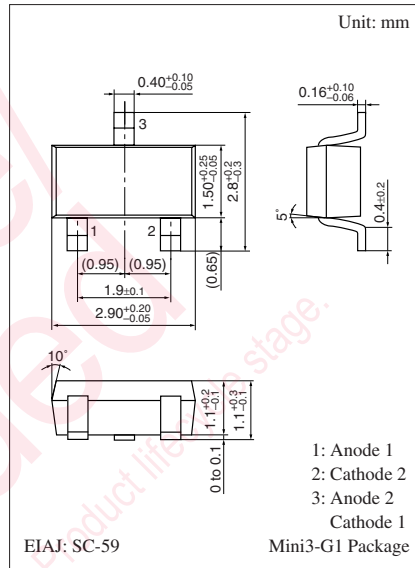
For switching circuits

■ Features

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

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

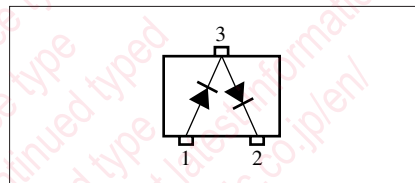
Parameter	Symbol	Rating	Unit	
Reverse voltage	MA3X153	$V_R$	40	V
	MA3X153A		80	
Maximum peak reverse voltage	MA3X153	$V_{RM}$	40	V
	MA3X153A		80	
Forward current	Single	$I_F$	100	mA
	Series		65	
Peak forward current	Single	$I_{FM}$	200	mA
	Series		130	
Junction temperature	$T_j$	150	$^\circ\text{C}$	
Storage temperature	$T_{stg}$	-55 to +150	$^\circ\text{C}$	



Marking Symbol

- MA3X153: MC
- MA3X153A: MP

Internal Connection



■ Electrical Characteristics  $T_a = 25^\circ\text{C} \pm 3^\circ\text{C}$

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Forward voltage	$V_F$	$I_F = 100 \text{ mA}$			1.2	V
Reverse voltage	MA3X153	$I_R = 100 \mu\text{A}$	40			V
	MA3X153A		80			
Reverse current	MA3X153	$V_R = 40 \text{ V}$			100	nA
	MA3X153A	$V_R = 75 \text{ V}$			100	
Terminal capacitance	$C_t$	$V_R = 0 \text{ V}, f = 1 \text{ MHz}$			5.0	pF
Reverse recovery time <sup>*3</sup>	$t_{rr}^{*1}$	$I_F = 10 \text{ mA}, V_R = 6 \text{ V}$		150		ns
	$t_{rr}^{*2}$	$I_{rr} = 0.1 I_R, R_L = 100 \Omega$		9		

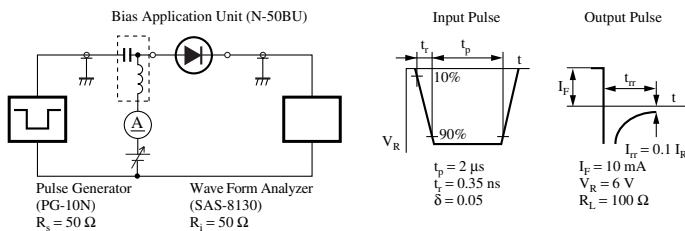
Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7031 measuring methods for diodes.

2. Absolute frequency of input and output is 100 MHz.

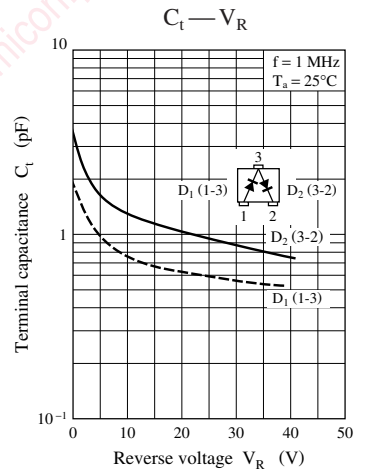
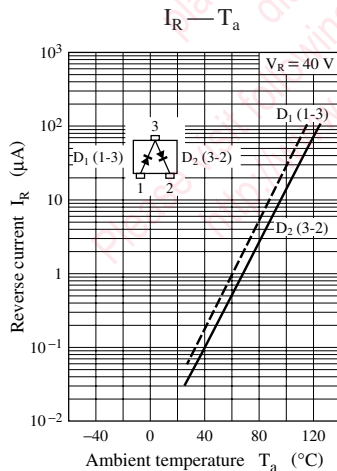
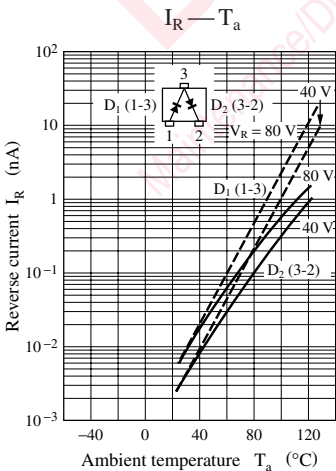
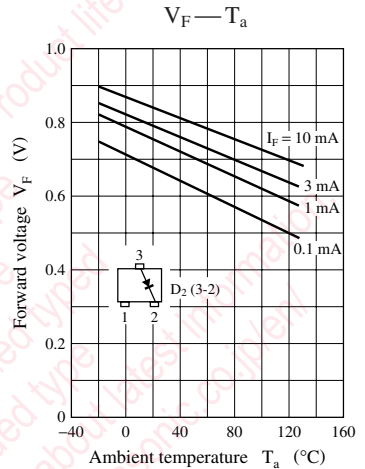
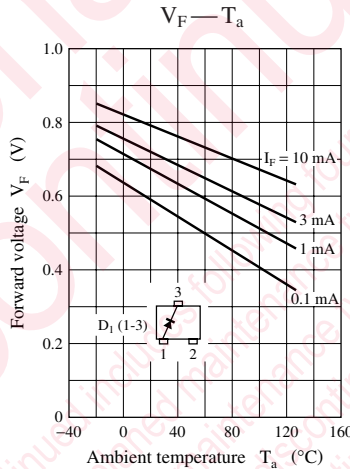
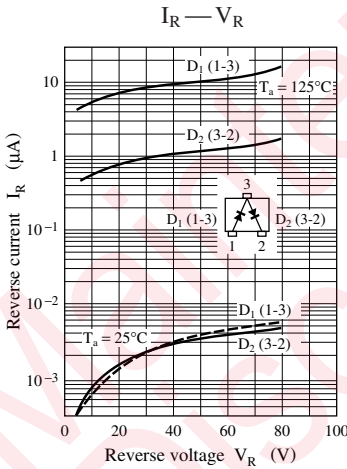
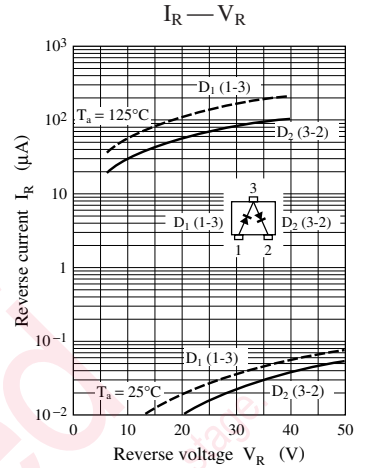
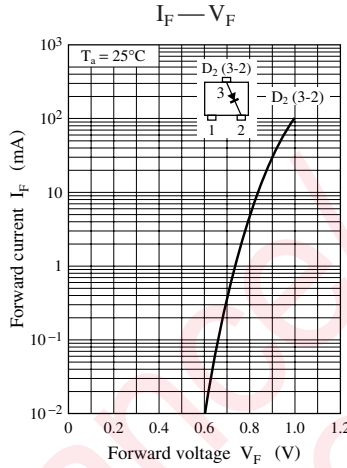
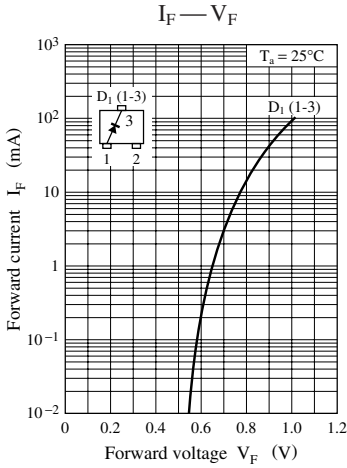
3. \*1: Between pins 2 and 3

\*2: Between pins 1 and 3

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



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





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