MA3X152A (MA152A), MA3X152K (MA152K)

Silicon epitaxial planar type

For high-speed switching circuits

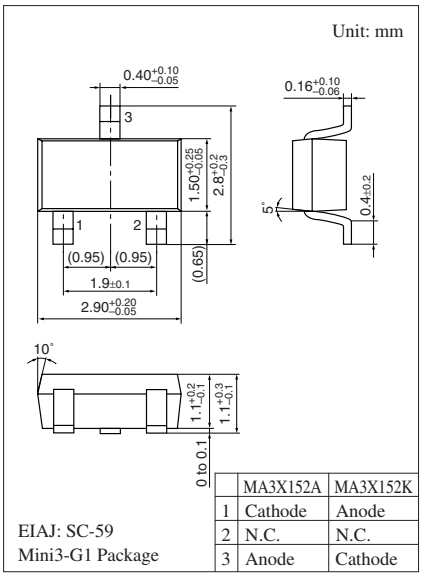
■ Features

- Short reverse recovery time t_{rr}
- Small terminal capacitance C_t

■ Absolute Maximum Ratings $T_a = 25°C$

Parameter	Symbol	Rating	Unit
Reverse voltage	V_R	80	V
Maximum peak reverse voltage	V_{RM}	80	V
Forward current	I_F	100	mA
Peak forward current	I_{FM}	225	mA
Non-repetitive peak forward surge current *	I_{FSM}	500	mA
Junction temperature	T_j	150	°C
Storage temperature	T_{stg}	−55 to +150	°C

Note) ∗: t = 1 s

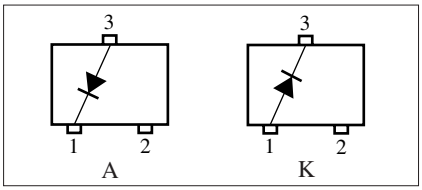


	MA3X152A	MA3X152K
1	Cathode	Anode
2	N.C.	N.C.
3	Anode	Cathode

Marking Symbol

- MA3X152A: MB
- MA3X152K: MI

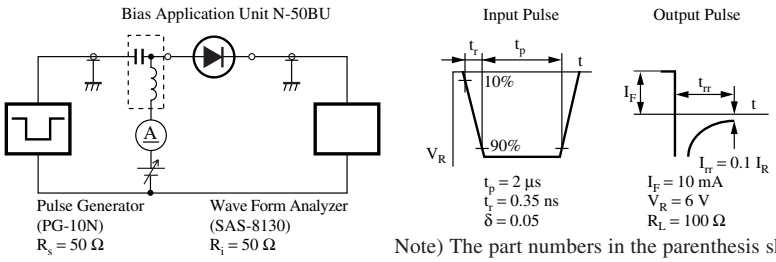
Internal Connection



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

Parameter		Symbol	Conditions	Min	Typ	Max	Unit
Forward voltage	MA3X152A	V_F	I_F = 100 mA			1.2	V
	MA3X152K					1.2	
Reverse voltage		V_R	I_R = 100 µA	80			V
Reverse current		I_R	V_R = 75 V			100	nA
Terminal capacitance		C_t	V_R = 0 V, f = 1 MHz			2	pF
Reverse recovery time *		t_{rr}	I_F = 10 mA, V_R = 6 V I_{rr} = 0.1 I_R , R_L = 100 Ω			3	ns

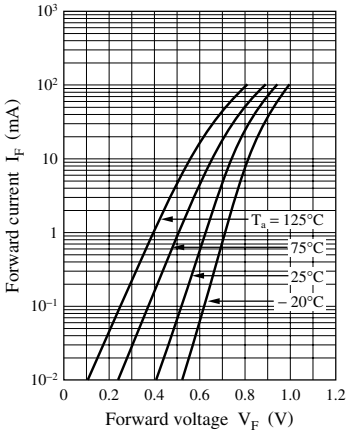
Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7031 measuring method for diodes.
2. Absolute frequency of input and output is 100 MHz.
3. ∗: t_{rr} measurement circuit



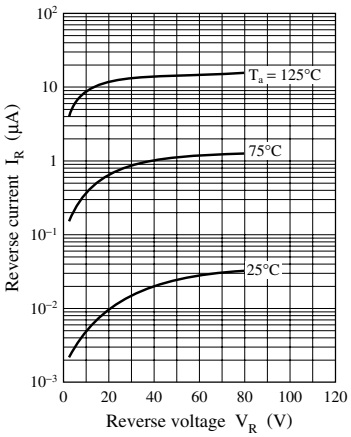
Note) The part numbers in the parenthesis show conventional part number.

Characteristics chart of MA3X152A

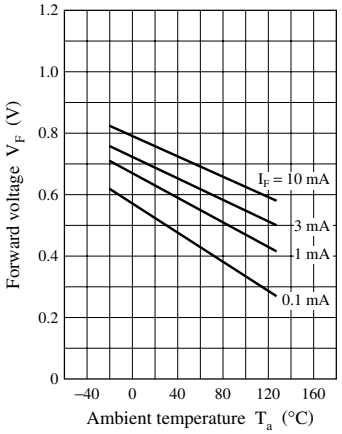
I_F — V_F



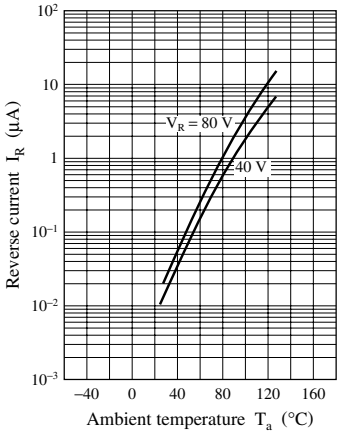
I_R — V_R



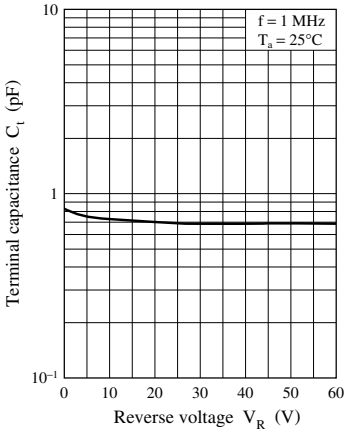
V_F — T_a



I_R — T_a

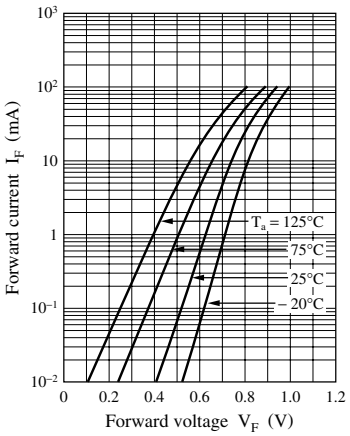


C_t — V_R

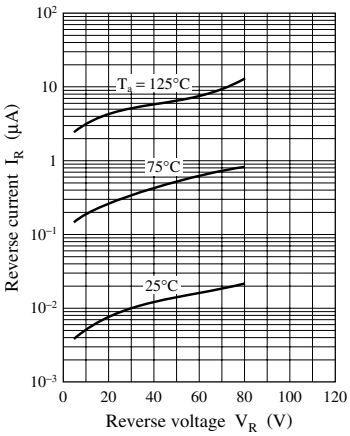


Characteristics chart of MA3X152K

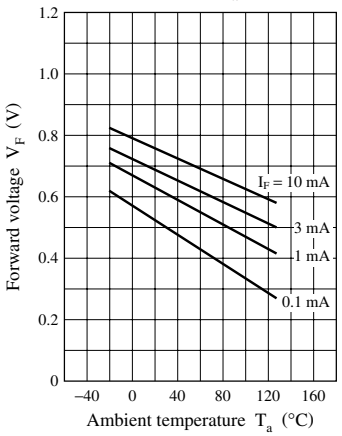
I_F — V_F



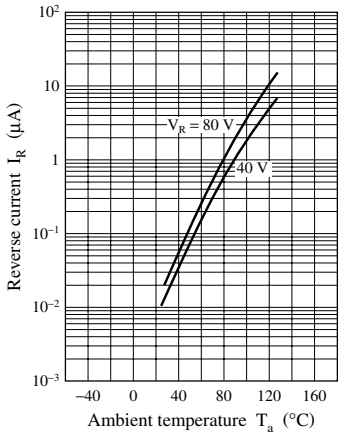
I_R — V_R



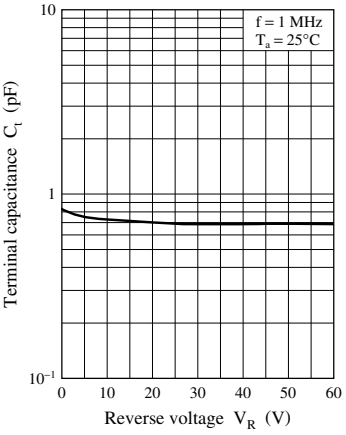
V_F — T_a



I_R — T_a



C_t — V_R



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