TENTATIVE

TOSHIBA Diode Silicon Epitaxial Planar Type

1SS403

High Voltage Switching Applications

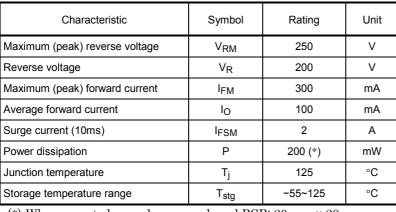
Unit in mm

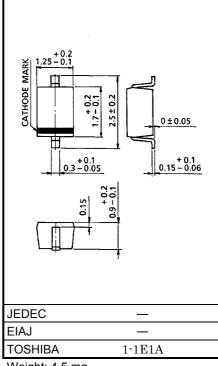
Two-pin small packages are suitable for higher mounting densities.

Excellent in forward current and forward voltage $V_{F(2)} = 0.90V \text{ (typ.)}$ characteristics Fast reverse recovery time $: t_{rr} = 60 \text{ns} \text{ (typ.)}$ Small total capacitance $: C_T = 1.5pF (typ.)$

Maximum Ratings (Ta = 25°C)

Characteristic	Symbol	Rating	Unit
Maximum (peak) reverse voltage	V_{RM}	250	V
Reverse voltage	V _R	200	V
Maximum (peak) forward current	I _{FM}	300	mA
Average forward current	Io	100	mA
Surge current (10ms)	I _{FSM}	2	Α
Power dissipation	Р	200 (*)	mW
Junction temperature	Tj	125	°C
Storage temperature range	T _{stg}	-55~125	°C





Weight: 4.5 mg

Electrical Characteristics (Ta = 25°C)

Characteristic	Symbol	Test Circuit	Test Condition	Min	Тур.	Max	Unit	
Forward voltage	V _{F (1)}	_	I _F = 10mA	-	0.72	1.0	V	
	V _{F (2)}	_	I _F = 100mA	_	0.90	1.2	v	
Reverse current	I _{R (1)}	_	V _R = 50V	_	_	0.1	μА	
	I _{R (2)}	_	V _R = 200V	-	-	1.0		
Total capacitance	C _T	_	V _R = 0, f = 1MHz	_	1.5	3.0	pF	
Reverse recovery time	t _{rr}	_	I _F = 10mA (Fig. 1)	_	10	60	ns	

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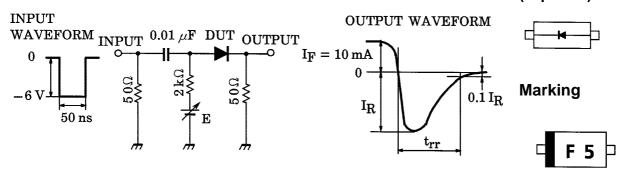
^(*) When mounted on a glass epoxy board PCB: 20 mm × 20 mm, with copper pad 4 mm × 4 mm.

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Fig.1 Reverse Recovery Time (t_{rr}) Test Circuit

Equivalent Circuit (Top View)



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