TOSHIBA Diode Silicon Epitaxial Planar Type

# 1SS360F

#### Ultra High Speed Switching Applications

- Small package : 1608 Flat lead
- Excellent in forward current and forward voltage characteristics : VF (3) = 0.92V (typ.)
- Fast reverse recovery time: trr = 1.6ns (typ.)
- Small total capacitance : CT = 2.2pF (typ.)

#### Maximum Ratings (Ta = 25°C)

Characteristic	Symbol	Rating	Unit	
Maximum (peak) reverse voltage	V <sub>RM</sub>	85	V	
Reverse voltage	V <sub>R</sub>	80	V	
Maximum (peak) forward current	I <sub>FM</sub>	300 (*)	mA	
Average forward current	Ι <sub>Ο</sub>	100 (*)	mA	
Surge current (10ms)	I <sub>FSM</sub>	2 (*)	А	
Power dissipation	Р	100	mW	
Junction temperature	Tj	125	°C	
Storage temperature range	T <sub>stg</sub>	-55~125	°C	

(\*) Unit rating. Total rating = unit rating × 1.5

#### $1.6 \pm 0.1$ 0.85 ± 0.1 -02 -02 0.27 0.5 $1.0 \pm 0.1$ .6±0.1 0.5 $13 \pm 0.05$ CATHODE1 1. CATHODE2 2. ESM 3. ANODE JEDEC \_\_\_\_ FIA.J 1-2SA1A TOSHIBA

Weigh: 2.3 mg

#### Electrical Characteristics (Ta = 25°C)

Characteristic	Symbol	Test Circuit	Test Condition	Min	Тур.	Max	Unit
Forward voltage	V <sub>F (1)</sub>	_	I <sub>F</sub> = 1mA	_	0.61	—	V
	V <sub>F (2)</sub>	_	I <sub>F</sub> = 10mA	_	0.74	—	
	V <sub>F (3)</sub>	_	I <sub>F</sub> = 100mA	_	0.92	1.20	
Reverse current	I <sub>R (1)</sub>	_	V <sub>R</sub> = 30V	_	-	0.1	μA
	I <sub>R (2)</sub>	_	V <sub>R</sub> = 80V	_	_	0.5	
Total capacitance	CT	—	V <sub>R</sub> = 0, f = 1MH <sub>z</sub>	_	2.2	4.0	pF
Reverse recovery time	t <sub>rr</sub>	_	I <sub>F</sub> = 10mA (Fig.1)		1.6	4.0	ns

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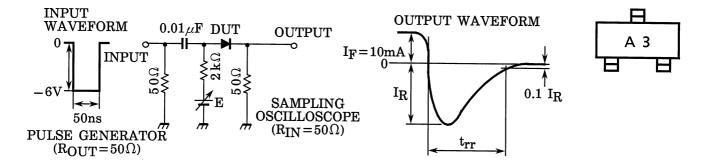
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Unit in mm

### Fig.1 Reverse Recovery Time (t<sub>rr</sub>) Test Circuit

Marking



## **TOSHIBA**

