

TOSHIBA DIODE SILICON EPITAXIAL PLANAR TYPE

1SS360F

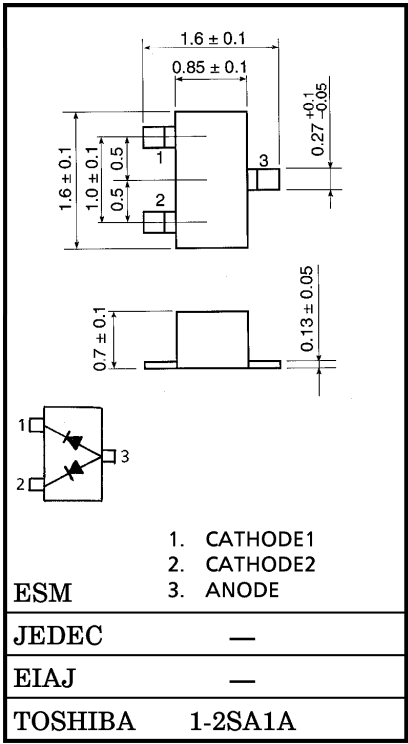
ULTRA HIGH SPEED SWITCHING APPLICATIONS

Unit in mm

- Small Package : 1608 Flat Lead
- Excellent in Forward Current and Forward Voltage Characteristics : $V_F(3) = 0.92\text{ V (Typ.)}$
- Fast Reverse Recovery Time : $t_{rr} = 1.6\text{ ns (Typ.)}$
- Small Total Capacitance : $C_T = 2.2\text{ pF (Typ.)}$

MAXIMUM RATINGS ($T_a = 25^\circ\text{C}$)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Maximum (Peak) Reverse Voltage	V_{RM}	85	V
Reverse Voltage	V_R	80	V
Maximum (Peak) Forward Current	I_{FM}	300 (*)	mA
Average Forward Current	I_O	100 (*)	mA
Surge Current (10 ms)	I_{FSM}	2 (*)	A
Power Dissipation	P	100	mW
Junction Temperature	T_j	125	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	$-55\sim 125$	$^\circ\text{C}$



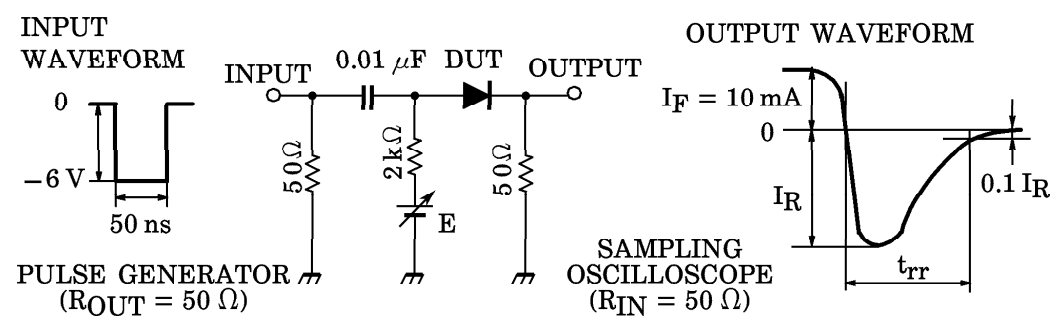
(*) Unit Rating. Total Rating = Unit Rating $\times$ 1.5

ELECTRICAL CHARACTERISTICS ($T_a = 25^\circ\text{C}$)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Forward Voltage	$V_F(1)$	$I_F = 1\text{ mA}$	—	0.61	—	V
	$V_F(2)$	$I_F = 10\text{ mA}$	—	0.74	—	
	$V_F(3)$	$I_F = 100\text{ mA}$	—	0.92	1.20	
Reverse Current	$I_R(1)$	$V_R = 30\text{ V}$	—	—	0.1	μA
	$I_R(2)$	$V_R = 80\text{ V}$	—	—	0.5	
Total Capacitance	C_T	$V_R = 0, f = 1\text{ MHz}$	—	2.2	4.0	pF
Reverse Recovery Time	f_T	$I_F = 10\text{ mA}$ (Fig.1)	—	1.6	4.0	ns

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Fig1. REVERSE RECOVERY TIME (t_{rr}) TEST CIRCUIT

MARKING

