

TOSHIBA DIODE SILICON EPITAXIAL PLANAR TYPE

# 1SS360F

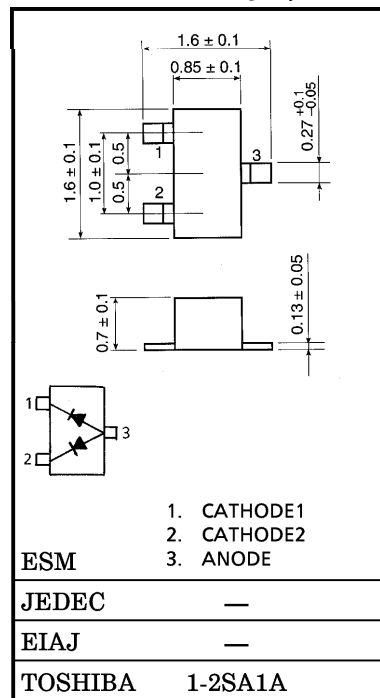
ULTRA HIGH SPEED SWITCHING APPLICATIONS

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	$T_{stg}$	-55~125	$^\circ\text{C}$



(\*) Unit Rating. Total Rating = Unit Rating × 1.5

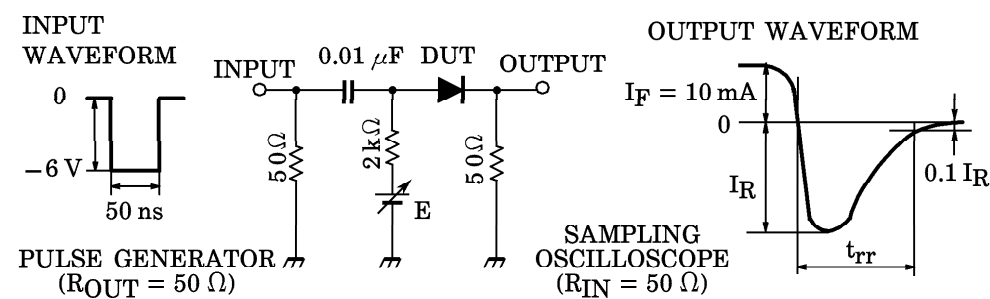
ELECTRICAL CHARACTERISTICS ( $T_a = 25^\circ\text{C}$ )

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	$\mu\text{A}$
	$I_R(2)$	$V_R = 80\text{ V}$	—	—	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

