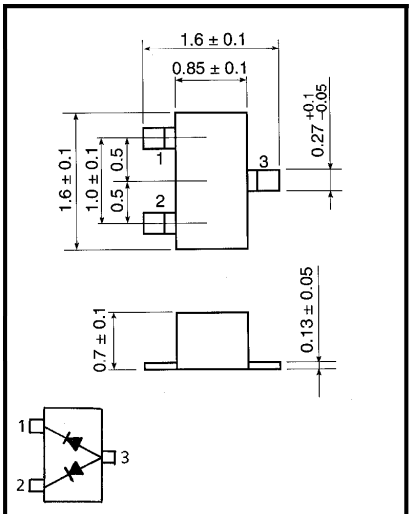
TOSHIBA DIODE SILICON EPITAXIAL PLANAR TYPE

1SS360F

ULTRA HIGH SPEED SWITCHING APPLICATIONS

Unit in mm

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



1. CATHODE1
2. CATHODE2
3. ANODE

ESM	
JEDEC	—
EIAJ	—
TOSHIBA	1-2SA1A

MAXIMUM RATINGS (Ta = 25°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	°C
Storage Temperature Range	T_{stg}	−55~125	°C

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

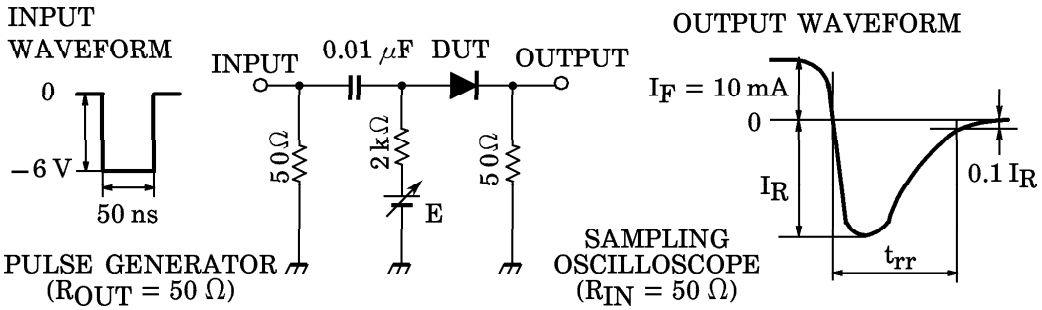
ELECTRICAL CHARACTERISTICS (Ta = 25°C)

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

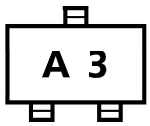
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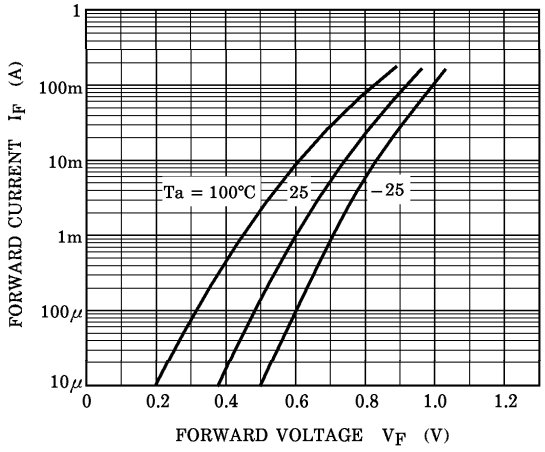
Fig1. REVERSE RECOVERY TIME (t_{rr}) TEST CIRCUIT



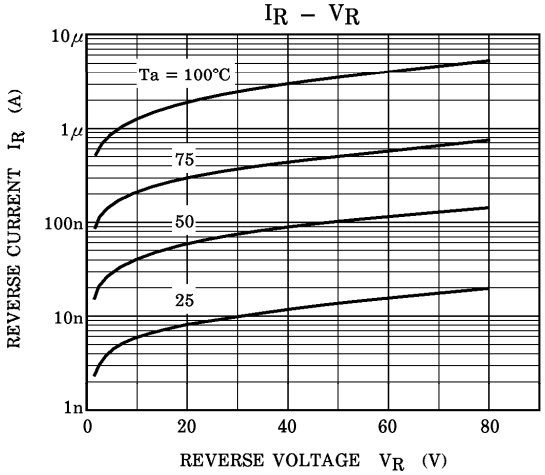
MARKING



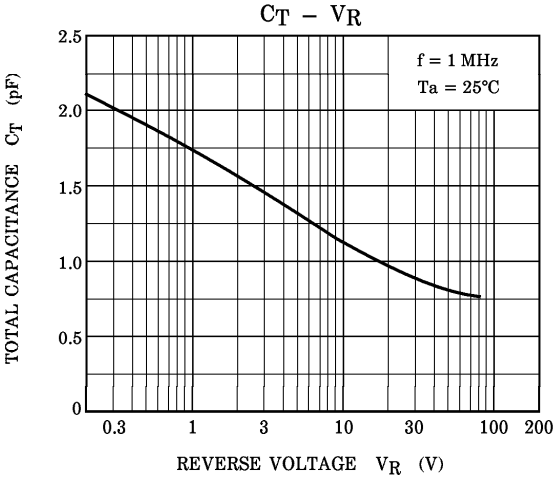
$I_F - V_F$



$I_R - V_R$



$C_T - V_R$



$t_{rr} - I_F$

