

9097250 TOSHIBA (DISCRETE/OPTO)

67C 09308 DT-03-09

Silicon Epitaxial Planar Type

Diode

1S2095A

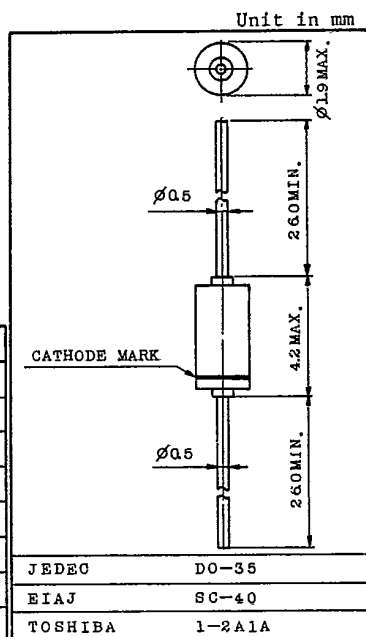
ULTRA HIGH SPEED SWITCHING APPLICATIONS.
CORE DRIVE APPLICATIONS.

FEATURES:

- Low Forward Voltage : $V_F=1.1V(\text{Max.})$
- High Power Dissipation : $P=350mW(\text{Max.})$
- Hermetically Sealed Miniature Glass Package
- Fast Reverse Recovery Time : $t_{rr}=8ns(\text{Max.})$
- Small Total Capacitance : $C_T=2.5pF(\text{Max.})$

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

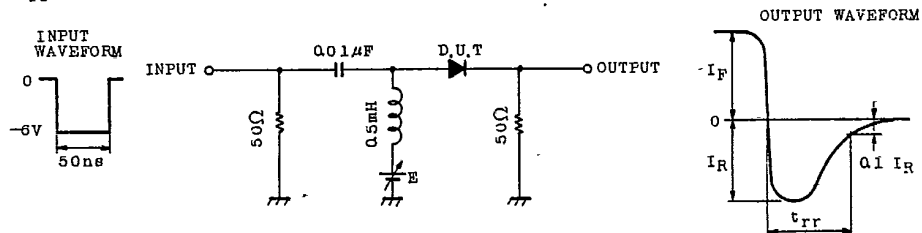
CHARACTERISTIC	SYMBOL	RATING	UNIT
Maximum(Peak) Reverse Voltage	V_{RM}	75	V
Reverse Voltage	V_R	70	V
Maximum(Peak) Forward Current	I_{FM}	750	mA
Average Forward Current	I_O	250	mA
Surge Current (1 sec)	I_{FSM}	1	A
Power Dissipation	P	350	mW
Junction Temperature	T_j	175	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	-65 ~ 175	$^\circ\text{C}$



Weight : 0.14g

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

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Forward Voltage	V_F	$I_F=200mA$	-	0.98	1.10	V
		$I_F=1mA$	-	0.57	0.65	
Reverse Voltage	V_R	$I_R=5\mu A$	70	-	-	V
Reverse Current	I_R	$V_R=50V$	-	0.01	0.1	μA
		$V_R=50V, T_a=150^\circ\text{C}$	-	-	100	
Total Capacitance	C_T	$V_R=0, f=1MHz$	-	1.5	2.5	pF
Reverse Recovery Time	t_{rr}	$I_F=I_R=200mA, R_L=100\Omega$ (Fig.)	-	6	8	ns

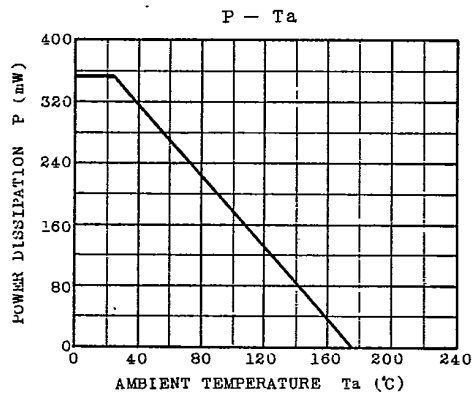
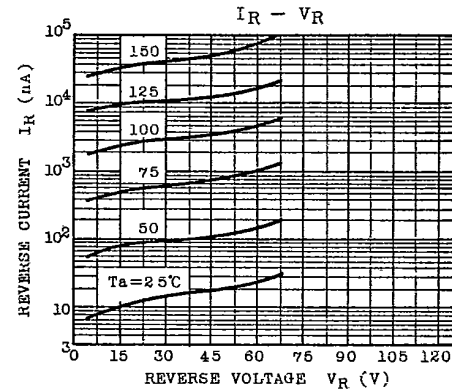
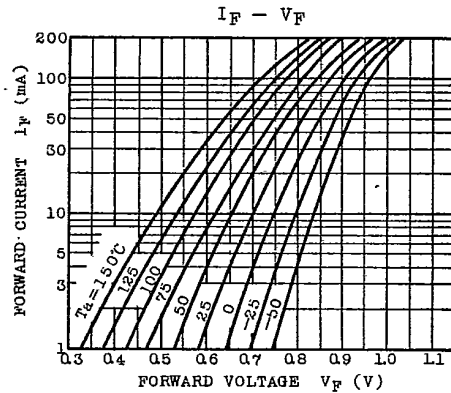
Fig. : t_{rr} TEST CIRCUIT

TOSHIBA CORPORATION

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