

Silicon Epitaxial Planar Type  
Diode

# 1S2095A

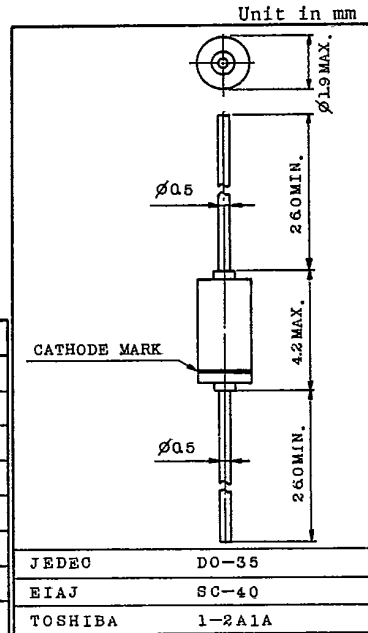
ULTRA HIGH SPEED SWITCHING APPLICATIONS.  
CORE DRIVE APPLICATIONS.

**FEATURES:**

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

**MAXIMUM RATINGS ( $T_a=25^\circ C$ )**

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	$^\circ C$
Storage Temperature Range	$T_{stg}$	-65 ~ 175	$^\circ C$

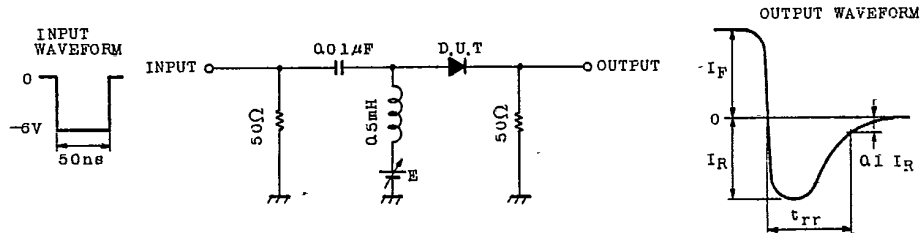


**ELECTRICAL CHARACTERISTICS ( $T_a=25^\circ C$ )**

Weight : 0.14g

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	$\mu A$
		$V_R=50V, T_a=150^\circ C$	-	-	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

