

9097250 TOSHIBA (DISCRETE/OPTO)

67C 09294 D T-03-09

Silicon Epitaxial Planar Type

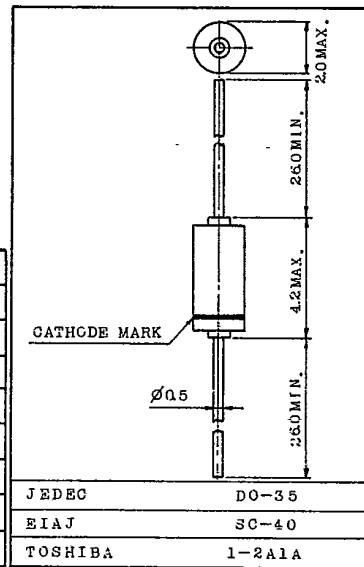
Diode

**1N4606**

TENTATIVE

COMMUNICATION AND INDUSTRIAL APPLICATIONS.  
HIGH VOLTAGE, ULTRA HIGH SPEED SWITCHING APPLICATIONS.

Unit in mm



## MAXIMUM RATINGS (Ta=25°C)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Maximum (Peak) Reverse Voltage	V <sub>RM</sub>	85	V
Reverse Voltage	V <sub>R</sub>	70	V
Maximum (Peak) Forward Current	I <sub>FM</sub>	600	mA
Average Forward Current	I <sub>O</sub>	200	mA
Surge Current (1 μs)	I <sub>FSM</sub>	4	A
Power Dissipation	P	500	mW
Junction Temperature	T <sub>j</sub>	200	°C
Storage Temperature Range	T <sub>stg</sub>	-65 ~ 200	°C

JEDEC DO-35

EIAJ SC-40

TOSHIBA 1-2A1A

Weight : 0.14g

## ELECTRICAL CHARACTERISTICS (Ta=25°C)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Breakdown Voltage	V <sub>BR</sub>	I <sub>R</sub> =100μA	85	-	-	V
Forward Voltage	V <sub>F</sub> (1)	I <sub>F</sub> =100μA	0.54	0.60	0.66	V
	V <sub>F</sub> (2)	I <sub>F</sub> =1mA	0.65	0.71	0.77	V
	V <sub>F</sub> (3)	I <sub>F</sub> =10mA	0.74	0.80	0.86	V
	V <sub>F</sub> (4)	I <sub>F</sub> =100mA	0.79	0.86	0.92	V
	V <sub>F</sub> (5)	I <sub>F</sub> =200mA	0.86	0.93	1.00	V
	V <sub>F</sub> (6)	I <sub>F</sub> =250mA	-	-	1.10	V
Reverse Current	I <sub>R</sub> (1)	V <sub>R</sub> =50V	-	-	100	nA
	I <sub>R</sub> (2)	V <sub>R</sub> =50V, Ta=100°C	-	-	25	μA
	I <sub>R</sub> (3)	V <sub>R</sub> =70V	-	-	250	nA
Total Capacitance	C <sub>T</sub>	V <sub>R</sub> =0, f=1MHz	-	-	2.5	pF
Reverse Recovery Time	t <sub>rr</sub> (1)	I <sub>F</sub> =I <sub>R</sub> =10mA, I <sub>rr</sub> =1mA	-	-	6	ns
	t <sub>rr</sub> (2)	I <sub>F</sub> =I <sub>R</sub> =10 ~ 200mA I <sub>rr</sub> =0.1 I <sub>F</sub>	-	-	4	ns
	t <sub>rr</sub> (3)	I <sub>F</sub> =I <sub>R</sub> =200 ~ 400mA I <sub>rr</sub> =0.1 I <sub>F</sub>	-	-	6	ns

TOSHIBA CORPORATION