

9097250 TOSHIBA (DISCRETE/OPTO)

67C 09286 D T-03-09

Silicon Epitaxial Planar Type

Diode

**1N916, 1N916A,
1N916B**

TENTATIVE

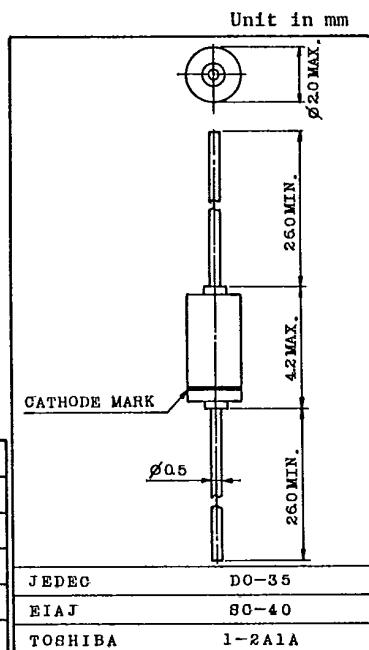
COMMUNICATION AND INDUSTRIAL APPLICATIONS.
HIGH VOLTAGE, ULTRA HIGH SPEED SWITCHING APPLICATIONS.

FEATURES:

- Low Forward Voltage : $V_F=1.0V$ (Max.)
- Small Total Capacitance : $C_T=2pF$ (Max.)
- Fast Reverse Recovery Time : $t_{rr}=4ns$ (Max.)
- Hermetically Sealed Miniature Glass Package.

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

CHARACTERISTIC	SYMBOL	RATING	UNIT
Maximum (peak) Reverse Voltage	V_{RM}	100	V
Reverse Voltage	V_R	75	V
Maximum (Peak) Forward Current	I_{FM}	450	mA
Average Forward Current	I_O	150	mA
Surge Current (1 μs)	I_{FSM}	2	A
Power Dissipation	P	500	mW
Junction Temperature	T_j	200	$^\circ C$
Storage Temperature Range	T_{stg}	-65 ~ 200	$^\circ C$



Weight : 0.14g

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

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Forward Voltage	1N916	$V_F(1)$ $I_F=10mA$	-	0.75	1.0	V
	1N916A	$V_F(2)$ $I_F=20mA$	-	0.79	1.0	V
	1N916B	$V_F(3)$ $I_F=5mA$	0.63	0.68	0.73	V
		$V_F(4)$ $I_F=30mA$	-	0.81	1.0	V
Reverse Current	IR(1)	$V_R=20V$	-	-	25	nA
	IR(2)	$V_R=20V$, $T_a=150^\circ C$	-	-	50	μA
	IR(3)	$V_R=75V$	-	-	5	μA
Total Capacitance	C_T	$V_R=0$, $f=1MHz$	-	-	2	pF
Reverse Recovery Time	t_{rr}	$I_F=10mA$, $V_R=6V$ $R_L=100\Omega$, $I_{RR}=1mA$	-	-	4	ns

TOSHIBA CORPORATION