

9097250 TOSHIBA (DISCRETE/OPTO)

67C 09285 D T-03-09

**1N914, 1N914A,
1N914B**

Silicon Epitaxial Planar Type

Diode

TENTATIVE

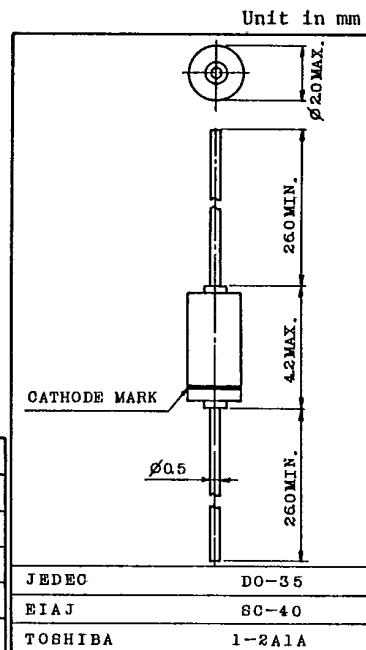
COMMUNICATION AND INDUSTRIAL APPLICATIONS.
HIGH VOLTAGE, ULTRA HIGH SPEED SWITCHING APPLICATIONS.

FEATURES:

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

MAXIMUM RATINGS (Ta=25°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 μ s)	I_{FSM}	2	A
Power Dissipation	P	500	mW
Junction Temperature	T_j	200	°C
Storage Temperature Range	T_{stg}	-65 ~ 200	°C



Weight : 0.14g

ELECTRICAL CHARACTERISTICS (Ta=25°C)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Forward Voltage	1N914	$V_F(1)$ $I_F=10mA$	-	0.75	1.0	V
	1N914A	$V_F(2)$ $I_F=20mA$	-	0.79	1.0	V
	1N914B	$V_F(3)$ $I_F=5mA$	0.62	0.67	0.72	V
		$V_F(4)$ $I_F=100mA$	-	0.9	1.0	V
Reverse Current	$I_R(1)$	$V_R=20V$	-	-	25	nA
	$I_R(2)$	$V_R=20V, T_a=150^\circ C$	-	-	50	μA
	$I_R(3)$	$V_R=75V$	-	-	5	μA
Total Capacitance	C_T	$V_R=0, f=1MHz$	-	1.5	4	pF
Reverse Recovery Time	t_{rr}	$I_F=10mA, V_R=6V$ $R_L=100\Omega, I_{rr}=1mA$	-	2.0	4	ns

TOSHIBA CORPORATION