

9097250 TOSHIBA (DISCRETE/OPTO)

67C 09290 D T-03-09

Silicon Epitaxial Planar Type

Diode

1N4150

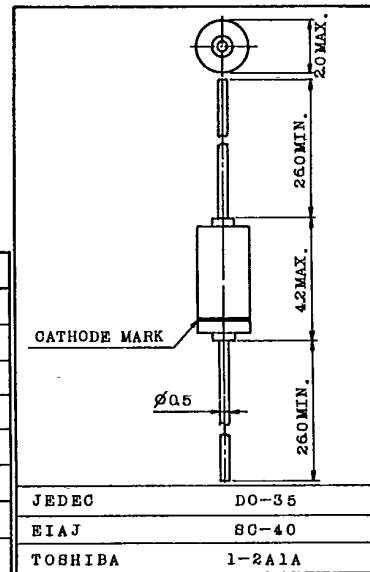
TENTATIVE

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 _{RM} | 75 | V |
| Reverse Voltage | V _R | 50 | V |
| Maximum (Peak) Forward Current | I _{FM} | 600 | mA |
| Average Forward Current | I _O | 200 | mA |
| Surge Current (1 μs) | I _{FSM} | 4 | 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 | V _F (1) | I _F =1mA | 0.54 | 0.58 | 0.62 | V |
| | V _F (2) | I _F =10mA | 0.66 | 0.70 | 0.74 | V |
| | V _F (3) | I _F =50mA | 0.76 | 0.81 | 0.86 | V |
| | V _F (4) | I _F =100mA | 0.82 | 0.87 | 0.92 | V |
| | V _F (5) | I _F =200mA | 0.87 | 0.94 | 1.00 | V |
| Breakdown Voltage | V _{BR} | I _R =100μA | 75 | - | - | V |
| Reverse Current | I _R (1) | V _R =50V | - | - | 100 | nA |
| | I _R (2) | V _R =50V, Ta=150°C | - | - | 100 | μA |
| Total Capacitance | C _T | V _R =0, f=1MHz | - | - | 2.5 | pF |
| Reverse Recovery Time | t _{rr} (1) | I _F =I _R =10 ~ 200mA I _{rr} =0.1 I _F | - | - | 4 | ns |
| | t _{rr} (2) | I _F =I _R =200 ~ 400mA I _{rr} =0.1 I _F | - | - | 6 | ns |
| | t _{rr} (3) | I _F =10mA, I _R =1mA I _{rr} =0.1mA | - | - | 6 | ns |

TOSHIBA CORPORATION