



THE DATASHEET OF
1N3600





ELECTRONICS, INC.
 44 FARRAND STREET
 BLOOMFIELD, NJ 07003
 (973) 748-5089
<http://www.nteinc.com>

1N3600 High Conductance Ultra Fast Diode

Features:

- DO-35 Package

Absolute Maximum Ratings: ($T_A = +25^{\circ}\text{C}$, Note 1 unless otherwise specified)

Working Inverse Voltage, W_{IV}	50V
Total Device Dissipation (Note 2), P_D	500mW
Derate above $+25^{\circ}\text{C}$	3.33mW/ $^{\circ}\text{C}$
Average Rectified Current, I_O	200mA
DC Forward Current, I_F	400mA
Peak Forward Surge Current, $I_{F(\text{surge})}$	
Pulse Width = 1.0 second	1.0A
Pulse Width = 1.0 microsecond	4.0A
Operating Junction Temperature, T_J	$+175^{\circ}\text{C}$
Storage Temperature Range, T_{stg}	-65° to $+200^{\circ}\text{C}$
Lead Temperature (During Soldering), T_L	$+260^{\circ}\text{C}$
Thermal Resistance, Junction-to-Ambient, R_{thJA}	$+300^{\circ}\text{C/W}$

Note 1. These ratings are limiting values above which the serviceability of the device may be impaired.

Note 2. These are steady state limits.

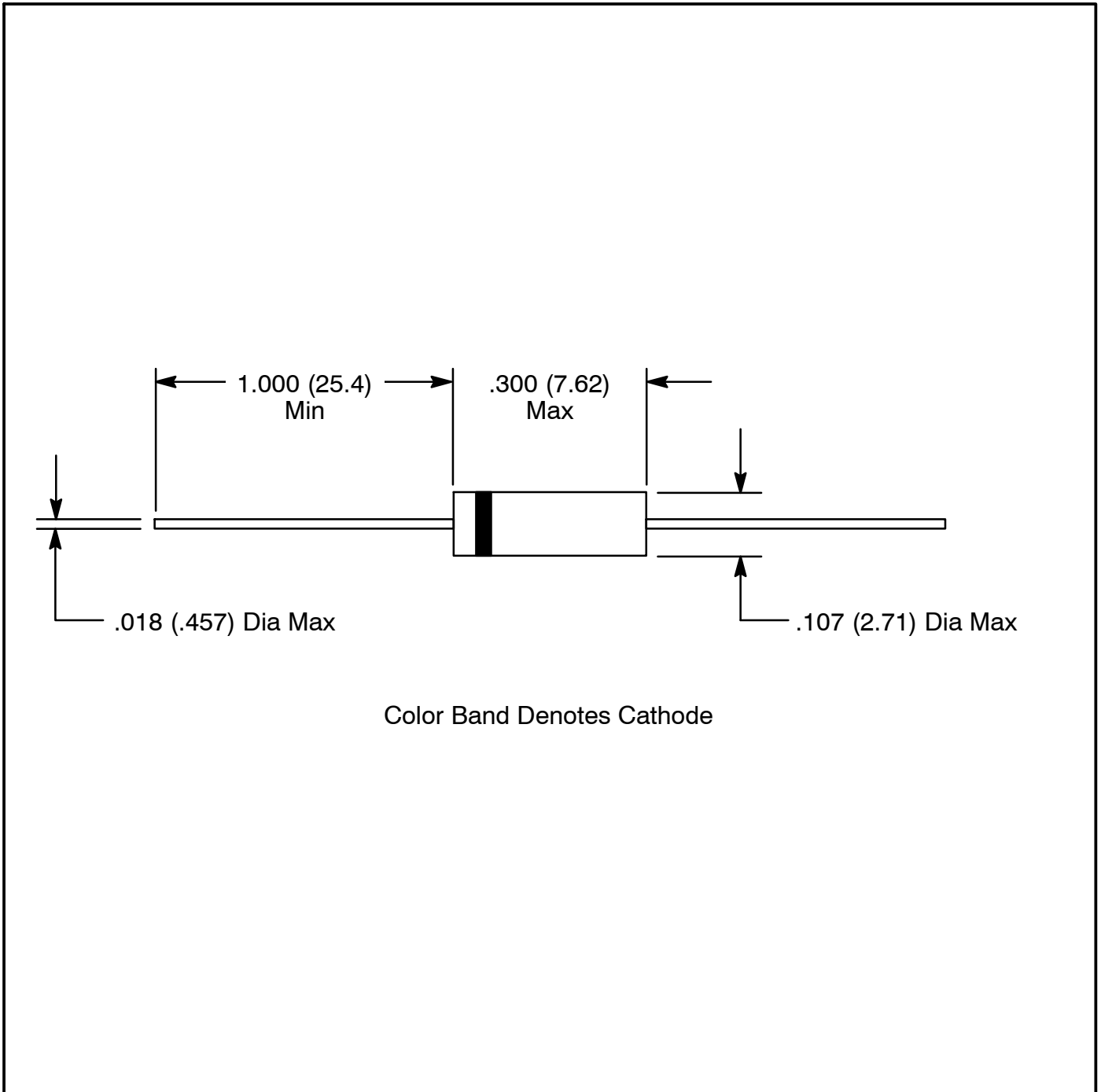
Electrical Characteristics: ($T_A = +25^{\circ}\text{C}$, unless otherwise specified)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Breakdown Voltage	B_V	$I_R = 5\mu\text{A}$	75	-	-	V
Forward Voltage	V_F	$I_F = 1\text{mA}$	540	-	620	mV
		$I_F = 10\text{mA}$	660	-	740	mV
		$I_F = 50\text{mA}$	760	-	860	mV
		$I_F = 100\text{mA}$	820	-	920	mV
		$I_F = 200\text{mA}$	0.87	-	1.0	V
Reverse Current	I_R	$V_R = 50\text{V}$	-	-	100	nA
		$V_R = 50\text{V}, T_A = +150^{\circ}\text{C}$	-	-	100	μA

Electrical Characteristics (Cont'd): ($T_A = +25^\circ\text{C}$, unless otherwise specified)


Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Capacitance	C	$V_R = 0, f = 1\text{MHz}$	-	-	2.5	pF
Reverse Recovery Time	t_{rr}	$I_F = I_R = 10\text{mA to } 200\text{mA},$ $R_L = 100\Omega, \text{ Note 3}$	-	-	4	ns
		$I_F = I_R = 200\text{mA to } 400\text{mA},$ $R_L = 100\Omega, \text{ Note 3}$	-	-	6	ns
Forward Recovery Time	t_{fr}	$I_F = 200\text{mA}, t_r = 0.4\text{ns}, V_{fr} = 1\text{V}$	-	-	10	ns

Note 3. Recovery to 0.1 t_f .



Looking for pricing, stock, or lifecycle information?

Click below to explore more details on WIN SOURCE:

 [View 1N3600 on WIN SOURCE](#)

 [NTE Information](#)

Optimize Your Supply Chain with WIN SOURCE Solutions

-  Global Sourcing Solution
-  Obsolete Management
-  Cost Control Management
-  Shortage Management
-  Alternative Solution
-  Excess Inventory Management