

Small Signal Diode 1N457, 1N457A

ABSOLUTE MAXIMUM RATINGS

(T_A = 25°C unless otherwise noted) (Notes 1, 2, 3)

Symbol	Rating	Value	Unit
V_{RRM}	Maximum Repetitive Reverse Voltage	70	٧
I _{F(AV)}	Average Rectified Forward Current	200	mA
I _{FSM}	Non-repetitive Peak Forward Surge Current Pulse Width = 1.0 s Pulse Width = 1.0 µs	1.0 4.0	Α
T _{STG}	Storage Temperature Range	-65 to +200	°C
T_J	Operating Junction Temperature	175	°C

Stresses exceeding those listed in the Maximum Ratings table may damage the device. If any of these limits are exceeded, device functionality should not be assumed, damage may occur and reliability may be affected.

- These ratings are limiting values above which the serviceability of any semiconductor device may be impaired.
- 2. These ratings are based on a maximum junction temperature of 200°C.
- These are steady limits. The factory should be consulted on applications involving pulsed or low duty cycle operations.

THERMAL CHARACTERISTICS

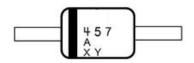
Symbol	Parameter	Max	Unit
P_{D}	Power Dissipation	500	mW
$R_{\theta JA}$	Thermal Resistance, Junction to Ambient	300	°C/W



AXIAL LEAD (DO-35) CASE 017AG

(Color Band Denotes Cathode)

MARKING DIAGRAM



457 / 457A = Specific Device Code XY = Date Code Band Color: Black

ORDERING INFORMATION

Device	Package	Shipping [†]
1N457	DO-35 (Pb-Free)	5,000 Units / Bulk
1N457A	DO-35 (Pb-Free)	5,000 Units / Bulk
1N457TR	DO-35 (Pb-Free)	10,000 Units / Tape & Reel

[†]For information on tape and reel specifications, including part orientation and tape sizes, please refer to our Tape and Reel Packaging Specifications Brochure, BRD8011/D.

ELECTRICAL CHARACTERISTICS

(T_A = 25°C unless otherwise noted)

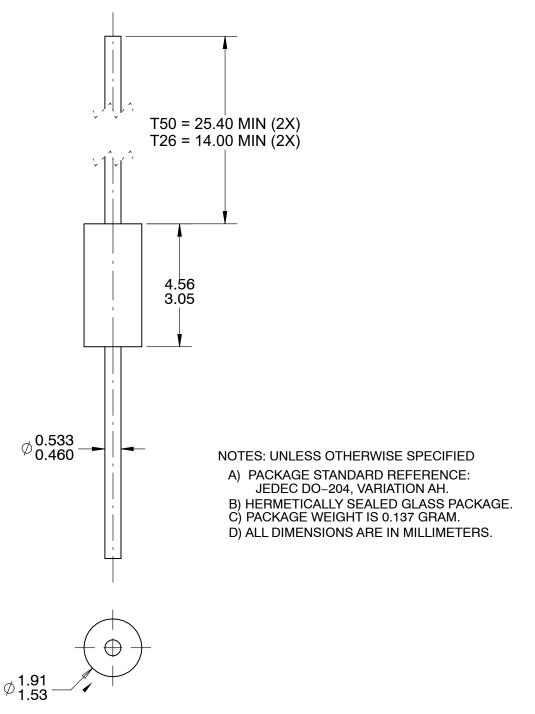
Symbol	Parameter	Test Conditions	Min	Max	Unit
V _R	Breakdown Voltage	$I_R = 100 \mu A$	70	-	V
V _F	Forward Voltage 1N457 1N457A	I _F = 20 mA I _F = 100 mA	-	1.0 1.0	V V
I _R	Reverse Leakage	V _R = 60 V V _R = 60 V, T _A = 150°C		25 5	nA μA
C _T	Total Capacitance 1N457	V _R = 0, f = 1.0 MHz	-	8.0	pF

Product parametric performance is indicated in the Electrical Characteristics for the listed test conditions, unless otherwise noted. Product performance may not be indicated by the Electrical Characteristics if operated under different conditions.



AXIAL LEAD CASE 017AG ISSUE O

DATE 31 AUG 2016



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