

Ultrafast Recovery Rectifiers

Qualified per MIL-PRF-19500/478

FEATURES / BENEFITS:

- ✓ Hermetic package
- ✓ All devices are 100% hot solder dipped
- ✓ JAN/ JANTX/JANTXV available per MIL-PRF-19500/478

MAXIMUM RATINGS

- ✓ Operating and Storage Temperature: -65°C to +175°C
- ✓ Thermal Resistance: 1.5 °C/W (junction to case)
- ✓ Forward surge current: 400A @ 8.3 ms half-sine
- ✓ Junction Capacitance = 300pF ($V_R=10V$, $f=1MHz$, $T_J=25°C$)

ELECTRICAL CHARACTERISTICS

TYPE NUMBER	WORKING PEAK REVERSE VOLTAGE V_{RWM} Volts	AVG RECTIFIED CURRENT Amps 100°C	MAXIMUM REVERSE CURRENT @ V_{RWM} μAmps		MAX. PEAK FORWARD VOLTAGE (PULSED) ¹ V_F @ 10A		MAXIMUM SURGE CURRENT ² I_{FSM} Amps	MAXIMUM REVERSE RECOVERY TIME ³ T_{rr} nsec
			25°C	100°C	25°C	100°C		
1N5812/R	50	20	10	1000	0.860	0.780	400	35
1N5814/R	100							
1N5816/R	150							

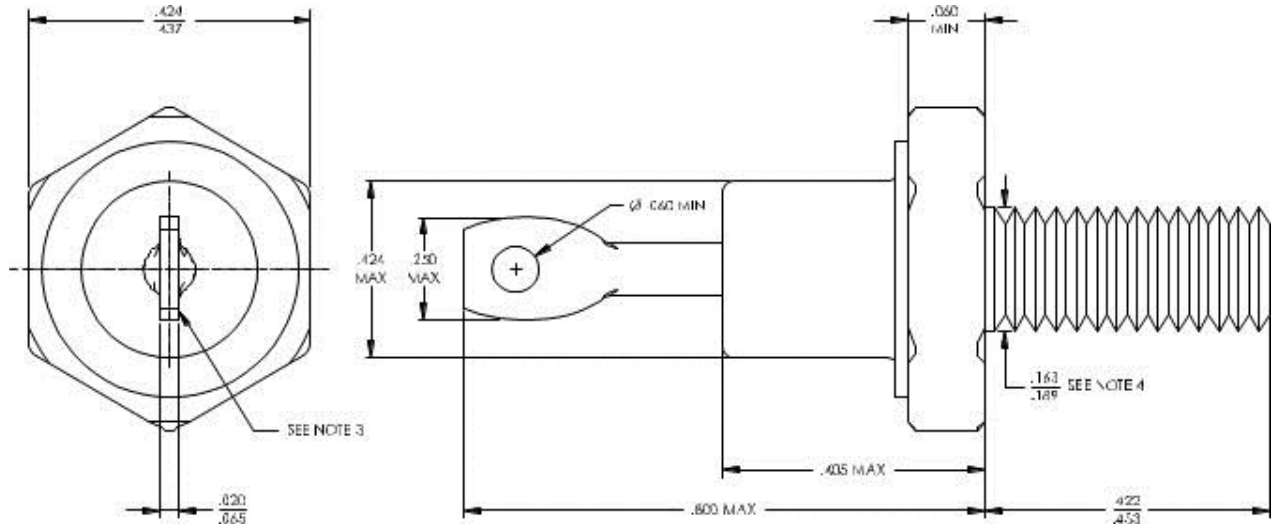
Note 1: Pulse test: Pulse width 300 μsec, duty cycle 2%

Note 2: $t_p = 8.3ms$ surge, $T_c = 100°C$

Note 3: $I_F = I_R = 1A$, $I_{(REC)} = 0.1A$

TECHNICAL DATA DATA SHEET 5546 REV A

PACKAGE DIMENSIONS (inches/mm)



NOTES:

1. Dimensions are in inches.
2. Millimeters are given for general information only.
3. Angular orientation of this terminal is undefined. Square or radius on end of terminals is optional.
4. Diameter variations within these limits are permitted.
5. The ANSI thread reference is 0.190-32 UNF-2A.
6. Max pitch diameter of plated threads shall be basic pitch diameter 0.169 inch (4.29 mm) reference FED-STD-H28 (Screw Thread Standards for Federal Services.)
7. Units must not be damaged by torque of 15 inch-pounds applied to 0.190-32 UNF-2B nut assembled on thread.
8. Complete threads to extend to within 0.078 inch (1.98 mm) of the seating plane.
9. Terminal-end shape is unrestricted.

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