



Micro Commercial Components  
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## 1N5812 thru 1N5816

### Features

- Full threads within 2 1/2 threads
- Standard Polarity : Stud is Cathode

## 20 Amp Ultra Fast Recovery Rectifier 50 to 150 Volts

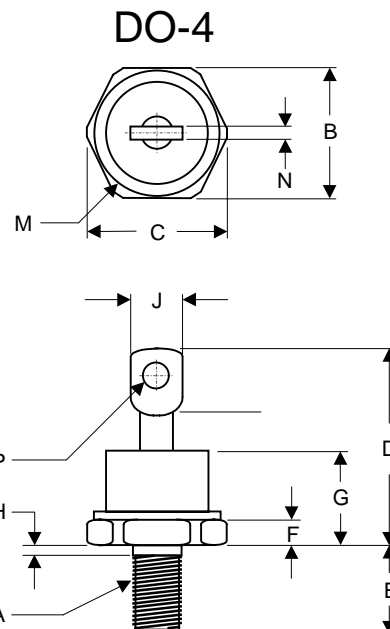
### Maximum Ratings

- Operating Junction Temperature: -65°C to +175°C
- Storage Temperature: -65°C to +175°C

MCC Part Number	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
1N5812	50V	35V	50V
1N5813	75V	52.5V	75V
1N5814	100V	70V	100V
1N5815	125V	87.5V	125V
1N5816	150V	105V	150V

### Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	20 A	$T_C = 100^\circ\text{C}$
Peak Forward Surge Current	$I_{FSM}$	400A	8.3ms, half sine
Maximum Instantaneous Forward Voltage	$V_F$	.89V .97V	$I_{FM} = 10\text{A} ; T_j = 25^\circ\text{C}$ $I_{FM} = 20\text{A} ; T_j = 25^\circ\text{C}$
Maximum DC Reverse Current At Rated DC Blocking Voltage	$I_R$	10uA 1mA	$T_j = 25^\circ\text{C}$ $T_j = 100^\circ\text{C}$
Maximum Reverse Recovery Time	$T_{rr}$	45nS	$I_F = I_R = 1.0\text{A dc}$ $I_{(REC)} = 0.1\text{A}$ $di / dt = 85\text{ A} / \mu\text{S}$



DIMENSIONS					
DIM	INCH ES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	10-32 UNF3A	Threads	Standard	Polarity	
B	.424	.437	10.77	11.10	
C	-----	.505	-----	12.82	
D	.600	.800	15.24	20.32	
E	.422	.453	10.72	11.50	
F	.075	.175	1.91	4.44	
G	-----	.405	-----	10.29	
H	.163	.189	4.15	4.80	
J	-----	.310	-----	7.87	
M	-----	.350	-----	8.89	Ø
N	.020	.065	0.51	1.65	
P	.060	.100	1.53	2.54	Ø

\*Pulse Test: Pulse Width 300µsec, Duty Cycle 2%

# 1N5812 thru 1N5816



Figure 1  
Typical Forward Characteristics

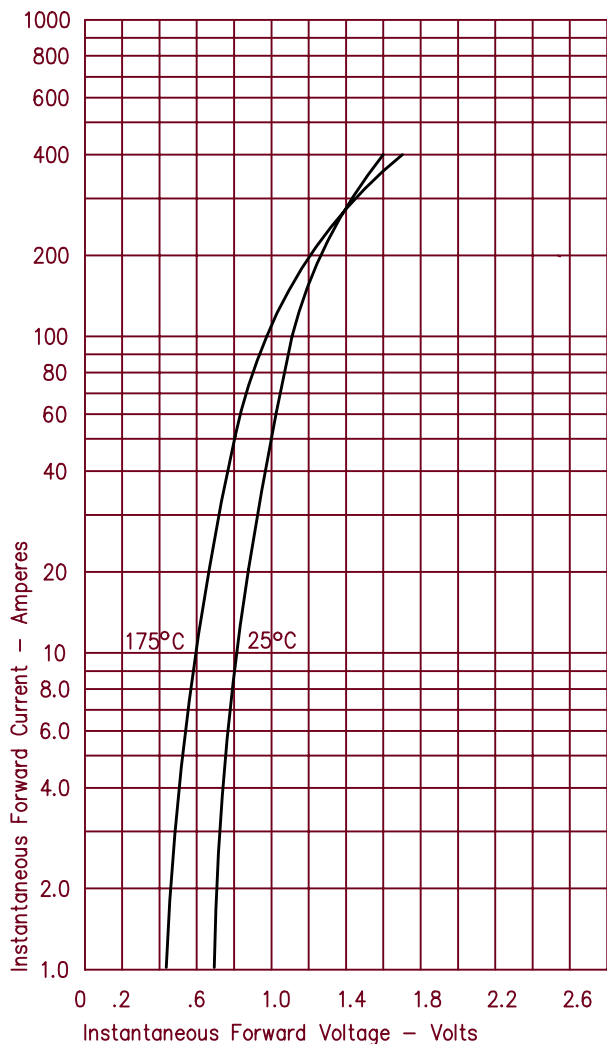


Figure 3  
Typical Junction Capacitance

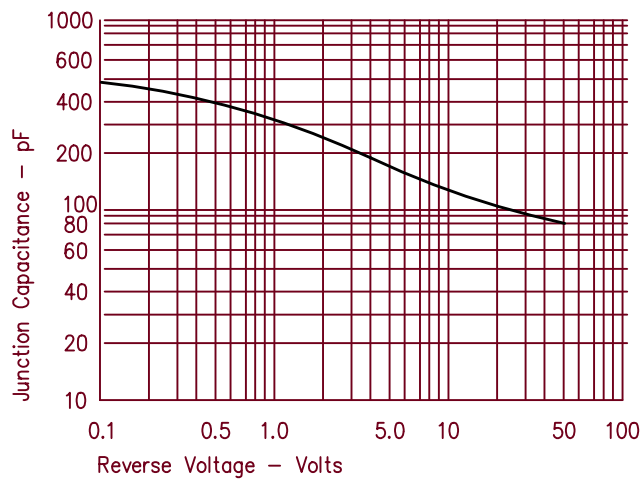


Figure 4  
Forward Current Derating

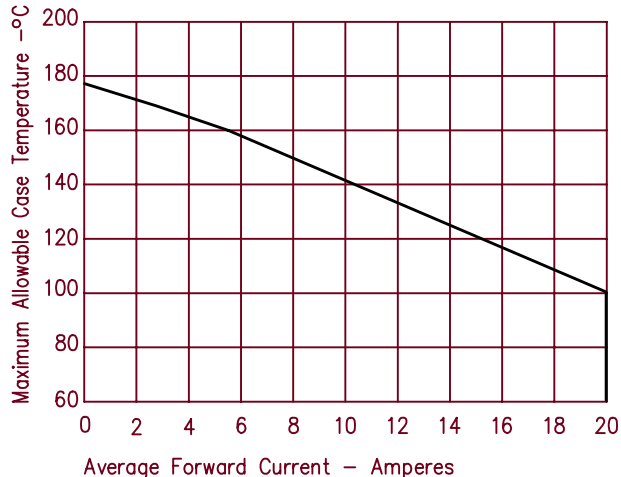


Figure 2  
Typical Reverse Characteristics

