



Micro Commercial Components
21201 Itasca Street Chatsworth
CA 91311
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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

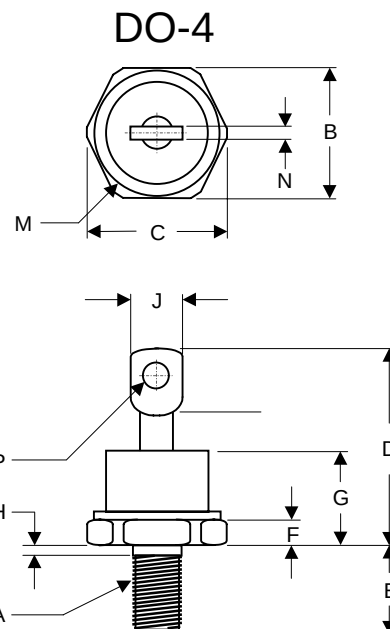
Maximum Ratings

- 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

•M•C•C•

Figure 1
Typical Forward Characteristics

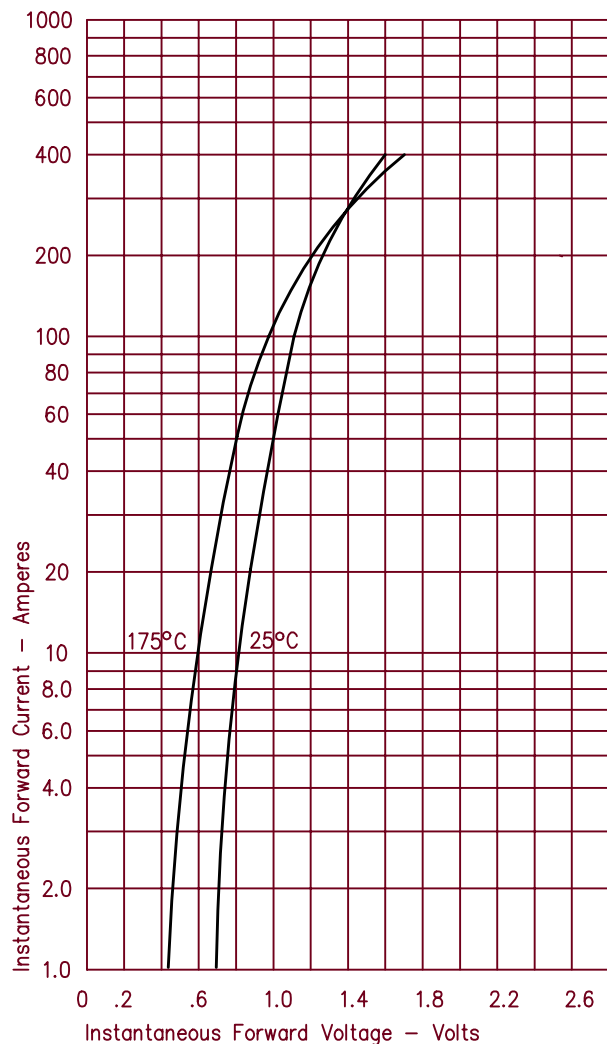


Figure 3
Typical Junction Capacitance

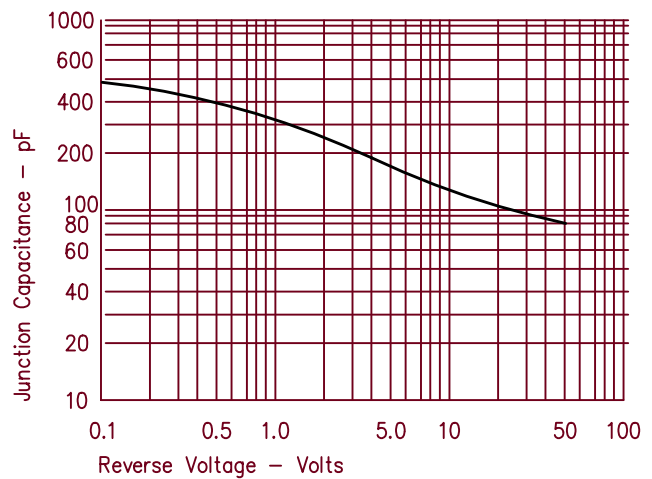


Figure 4
Forward Current Derating

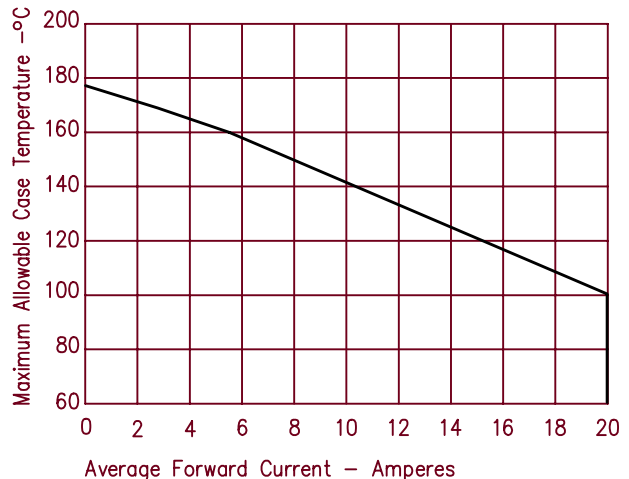


Figure 2
Typical Reverse Characteristics

