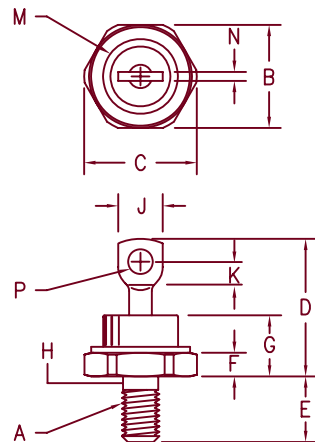


50 Amp Schottky Rectifier 1N6097—1N6098



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

Dim.	Inches		Millimeter		Notes
	Minimum	Maximum	Minimum	Maximum	
A	---	---	---	---	1/4-28
B	.669	.687	17.19	17.44	
C	---	.794	---	20.16	
D	---	1.000	---	25.40	
E	.422	.453	10.72	11.50	
F	.115	.200	2.93	5.08	
G	---	.450	---	11.43	
H	.220	.249	5.58	6.32	1
J	---	.375	---	9.52	
K	.156	---	3.96	---	
M	---	.515	---	13.08	Dia.
N	---	.080	---	2.03	
P	.140	.175	3.56	4.45	Dia.

D0203AB (D05)

Microsemi Catalog Number	Working Peak Reverse Voltage	Repetitive Peak Reverse Voltage
1N6097	30V	30V
1N6098	40V	40V

- Schottky Barrier Rectifier
- 150°C Junction Temperature
- Guard Ring Protection
- VRRM — 30 to 40 Volts
- Reverse Energy Tested

Electrical Characteristics

Average forward current	I _F (AV) 50 Amps	T _C = 70°C, square wave, R _{θJC} = 1.0°C/W
Maximum surge current	I _{FSM} 800 Amps	8.3 ms, half sine T _J = 150°C
Max repetitive peak reverse current	I _R (OV) 2 Amps	f = 1 KHz, 25°C, 1 μsec square wave
Max peak forward voltage	V _{FM} .60 Volts	I _{FM} = 10A: T _J = 25°C*
Max peak forward voltage	V _{FM} .86 Volts	I _{FM} = 157A: T _J = 70°C*
Max peak reverse current	I _{RM} 250 mA	V _{RRM} , T _J = 125°C*
Max peak reverse current	I _{RM} 2 mA	V _{RRM} , T _J = 25°C
Max junction capacitance	C _J 7000 pF	V _R = 1.0V, T _J = 25°C

*Pulse test: Pulse width 300 μsec, Duty cycle 2%

Thermal and Mechanical Characteristics

Storage temp range	T _{STG}	-65°C to 150°C
Operating junction temp range	T _J	-65°C to 150°C
Max thermal resistance	R _{θJC}	1.0°C/W Junction to case
Max mounting torque		30 inch pounds
Weight		0.54 ounce (15.3 grams) typical



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05-09-07 Rev. 2

1N6097-1N6098

Figure 1
Typical Forward Characteristics

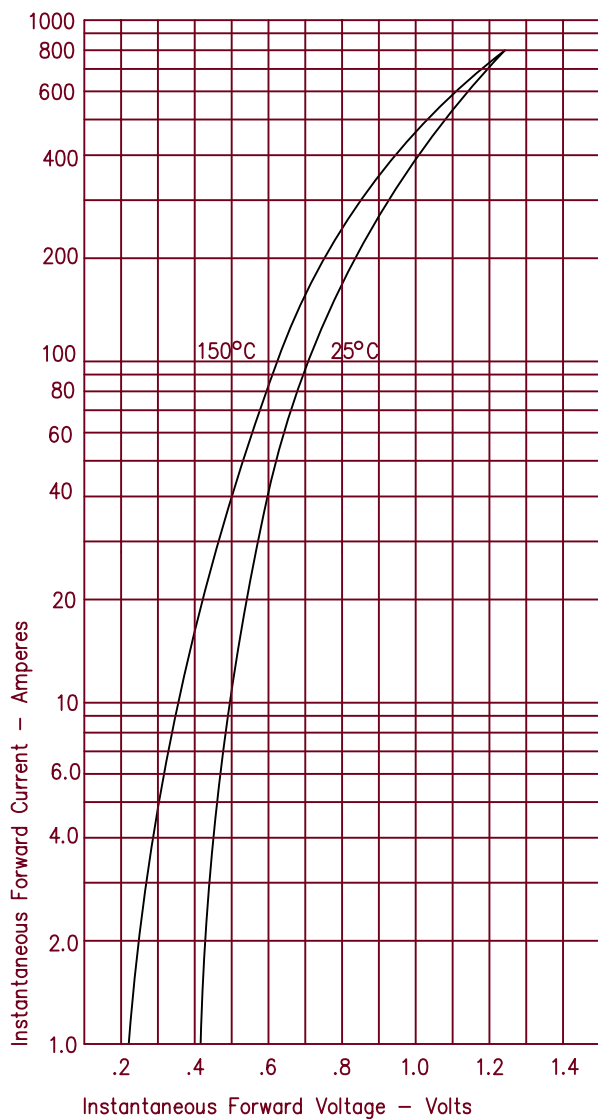


Figure 2
Typical Reverse Characteristics

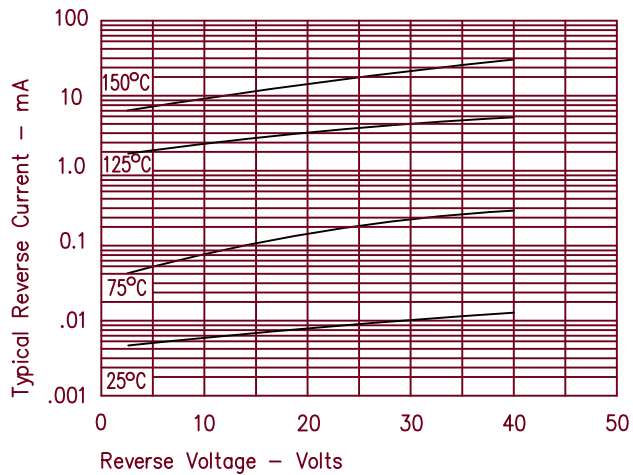


Figure 3
Typical Junction Capacitance

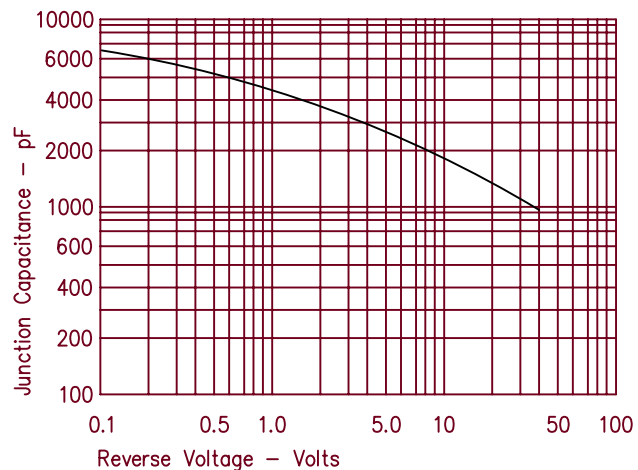


Figure 4
Forward Current Derating

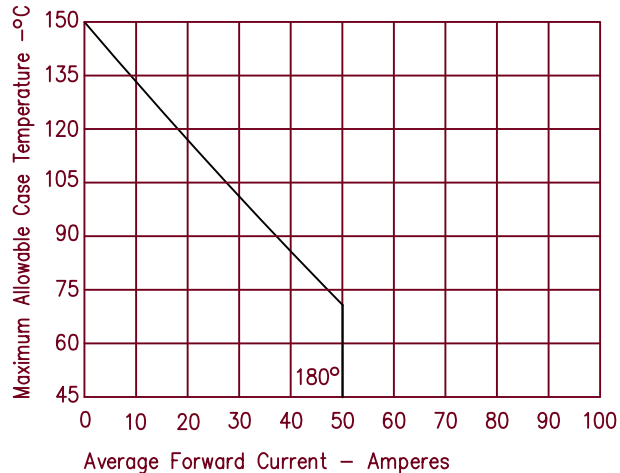


Figure 5
Maximum Forward Power Dissipation

