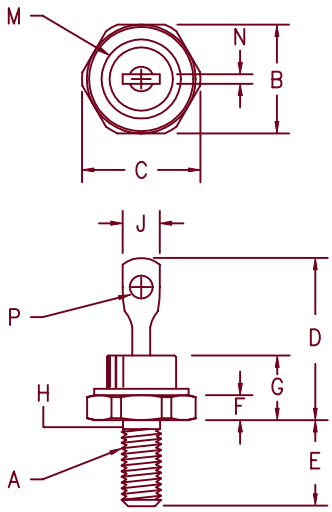
25 Amp Schottky Rectifier
1N6095–1N6096



Notes:
1. 10–32 UNF3A threads
2. Full threads within 2 1/2 threads.
3. Stud is Cathode.

Dim.	Inches		Millimeter		
	Minimum	Maximum	Minimum	Maximum	Notes
A	---	---	---	---	1,3
B	.423	.438	10.74	11.13	
C	---	.505	---	12.83	
D	.600	.800	15.24	20.32	
E	.422	.453	10.72	11.51	
F	.075	.175	1.91	4.45	
G	---	.405	---	10.29	
H	.163	.189	4.14	4.80	2
J	---	.250	---	6.35	
M	.265	.350	6.73	8.89	Dia.
N	.020	.065	.510	1.65	
P	.060	.095	1.52	2.41	Dia.

DO–203AA (DO4)

Microsemi Catalog Number	Working Peak Reverse Voltage	Repetitive Peak Reverse Voltage
1N6095	30V	30V
1N6096	40V	40V

- Schottky Barrier Rectifier
- Guard Ring Protection
- Low Forward Voltage
- V_{RRM} – 30 & 40 Volts
- 25 Amperes
- Reverse Energy Tested

Electrical Characteristics

Average forward current	$I_{F(AV)}$ 25 Amps	T_C = 70°C, half sine wave, $R_{\theta JC}$ = 2.0°C/W
Maximum surge current	I_{FSM} 400 Amps	8.3 ms, half sine
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} .86 Volts	I_{FM} = 78.5A: T_C = 70°C*
Max peak forward voltage	V_{FM} .60 Volts	I_{FM} = 5A: T_J = 25°C*
Max peak reverse current	I_{RM} 250 mA	V_{RRM}, T_J = 125°C*
Max peak reverse current	I_{RM} 1.5 mA	V_{RRM}, T_J = 25°C
Max junction capacitance	C_J 6000 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	$R_{\theta JC}$	2.0°C/W junction to case
Typical thermal resistance	$R_{\theta CS}$	0.5°C/W case to sink
Max mounting torque		15 inch pounds maximum
Weight		0.2 ounces (6.0 grams) typical

COLORADO Microsemi
800 Hoyt Street
Broomfield, CO. 80020
PH: (303) 469–2161
FAX: (303) 466–3775
www.microsemi.com

3–7–00 Rev. 1

1N6095–1N6096

Figure 1
Typical Forward Characteristics

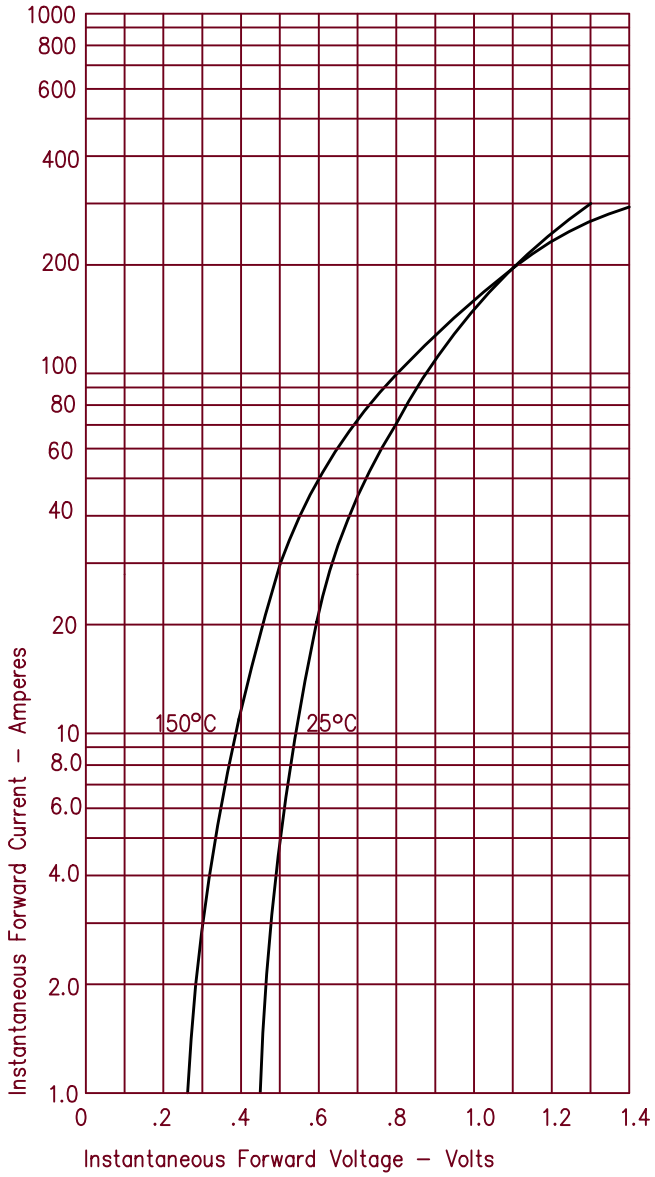


Figure 2
Typical Reverse Characteristics

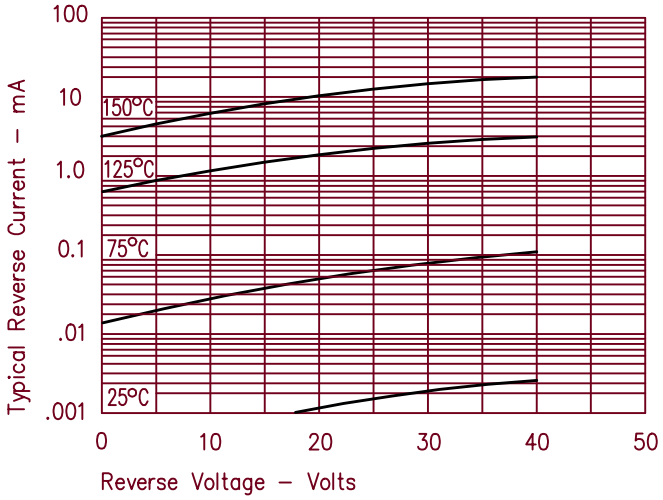


Figure 3
Typical Junction Capacitance

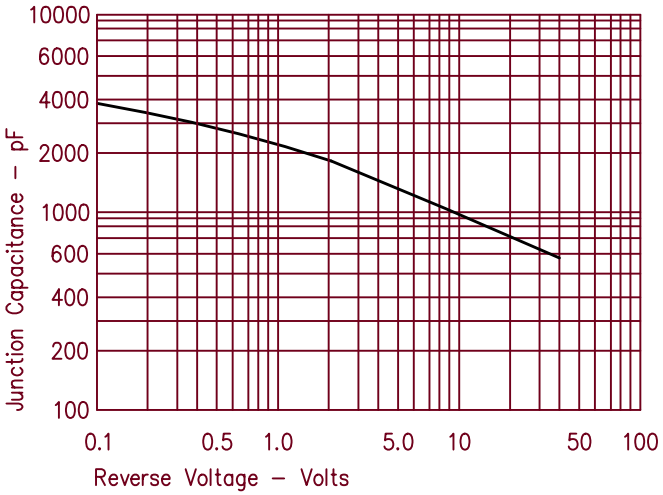


Figure 4
Forward Current Derating

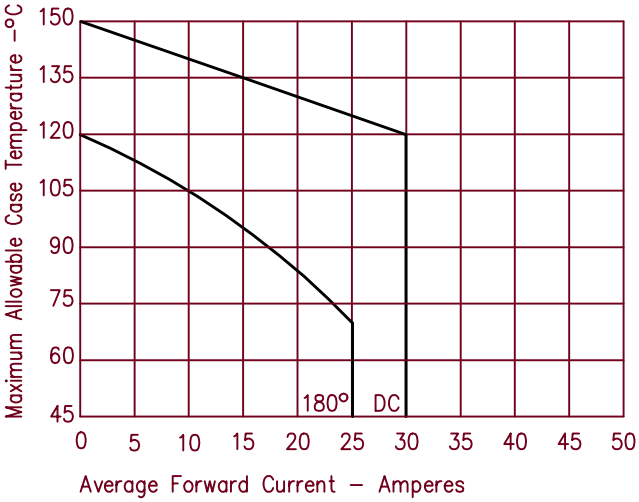


Figure 5
Maximum Forward Power Dissipation