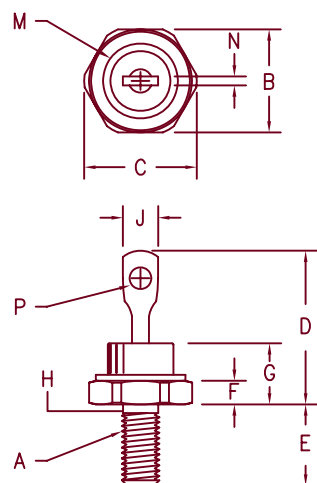


25 Amp Schottky Rectifier 1N6095—1N6096



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

Dim.	Inches		Millimeter		Notes
	Minimum	Maximum	Minimum	Maximum	
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	$T_C = 70^\circ C$, half sine wave, $R_{\theta JC} = 2.0^\circ C/W$
Maximum surge current	I_{FSM} 400 Amps	8.3 ms, half sine
Max repetitive peak reverse current	$I_R(OV)$ 2 Amps	$f = 1\text{ KHz}$, $25^\circ C$, 1 μsec square wave
Max peak forward voltage	V_{FM} .86 Volts	$I_{FM} = 78.5A$: $T_C = 70^\circ C^*$
Max peak forward voltage	V_{FM} .60 Volts	$I_{FM} = 5A$: $T_J = 25^\circ C^*$
Max peak reverse current	I_{RM} 250 mA	V_{RRM} , $T_J = 125^\circ C^*$
Max peak reverse current	I_{RM} 1.5 mA	V_{RRM} , $T_J = 25^\circ C$
Max junction capacitance	C_J 6000 pF	$V_R = 1.0V$, $T_J = 25^\circ C$

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

Thermal and Mechanical Characteristics

Storage temp range	T_{STG}	$-65^\circ C$ to $150^\circ C$
Operating junction temp range	T_J	$-65^\circ C$ to $150^\circ C$
Max thermal resistance	$R_{\theta JC}$	$2.0^\circ C/W$ junction to case
Typical thermal resistance	$R_{\theta CS}$	$0.5^\circ C/W$ case to sink
Max mounting torque		15 inch pounds maximum
Weight		0.2 ounces (6.0 grams) typical



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05-09-07 Rev. 2

1N6095-1N6096

Figure 1
Typical Forward Characteristics

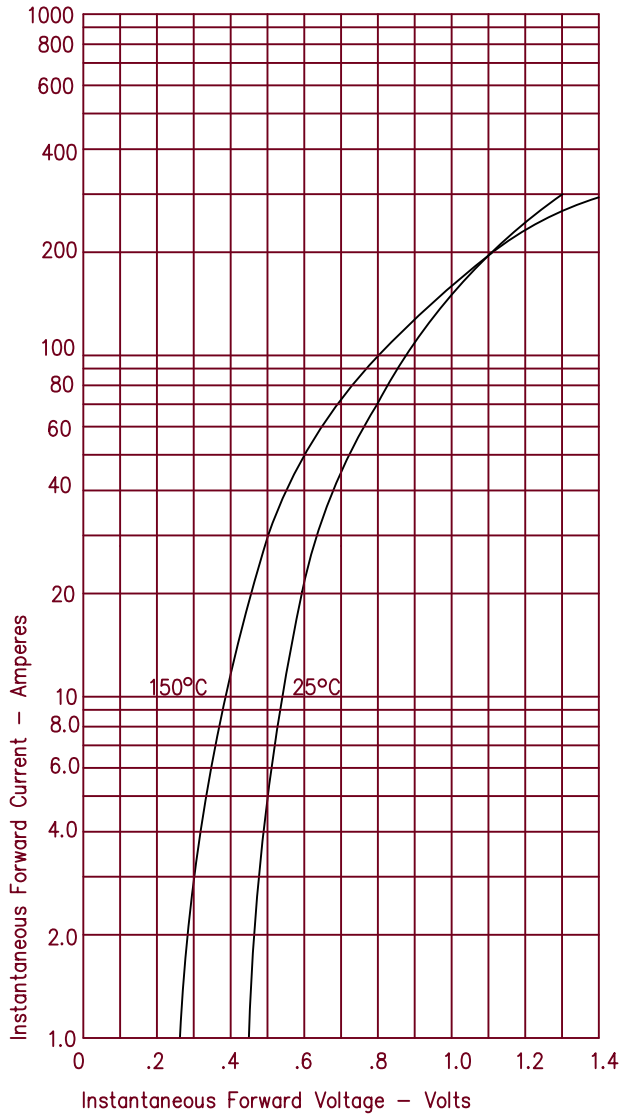


Figure 2
Typical Reverse Characteristics

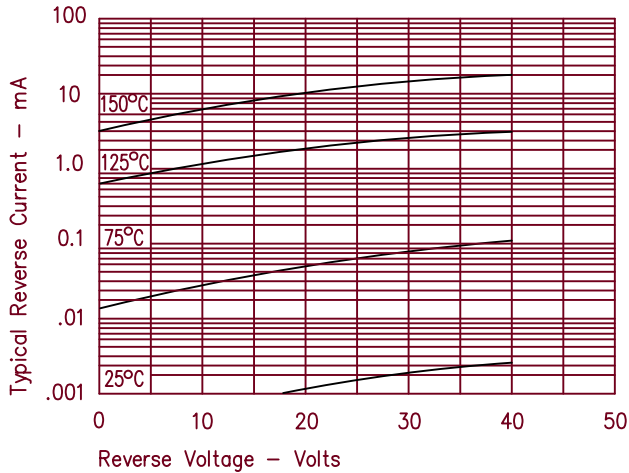


Figure 3
Typical Junction Capacitance

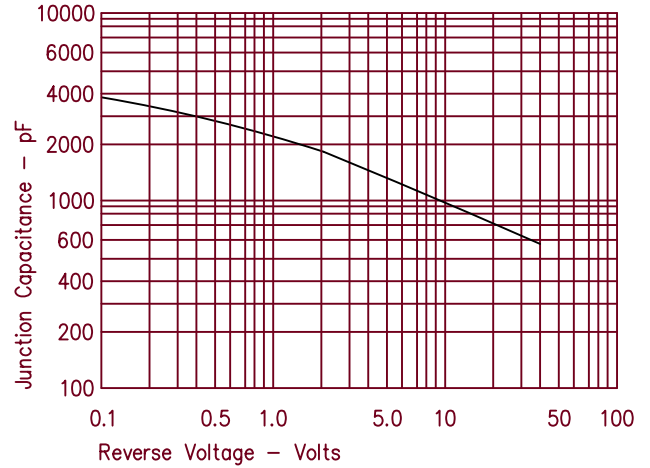


Figure 4
Forward Current Derating

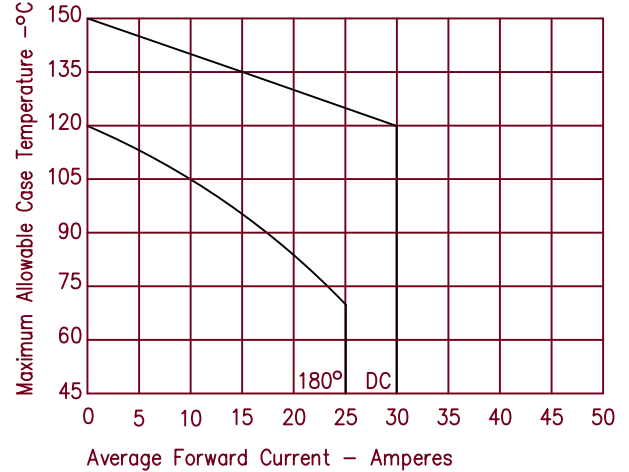


Figure 5
Maximum Forward Power Dissipation

