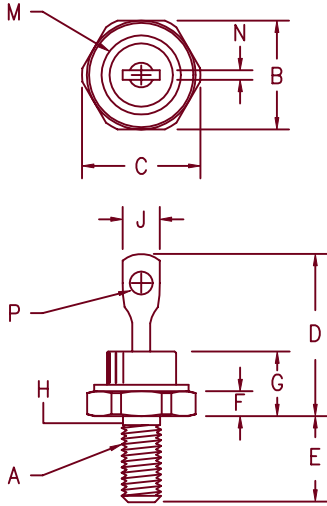


# 25 Amp Schottky Rectifier 1N6095-1N6096



- 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 (D04)

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
- VRRM - 30 & 40 Volts
- 25 Amperes
- Reverse Energy Tested

### Electrical Characteristics

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

\*Pulse test: Pulse width 300  $\mu\text{sec}$ , Duty cycle 2%

### Thermal and Mechanical Characteristics

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

# 1N6095-1N6096

Figure 1  
Typical Forward Characteristics

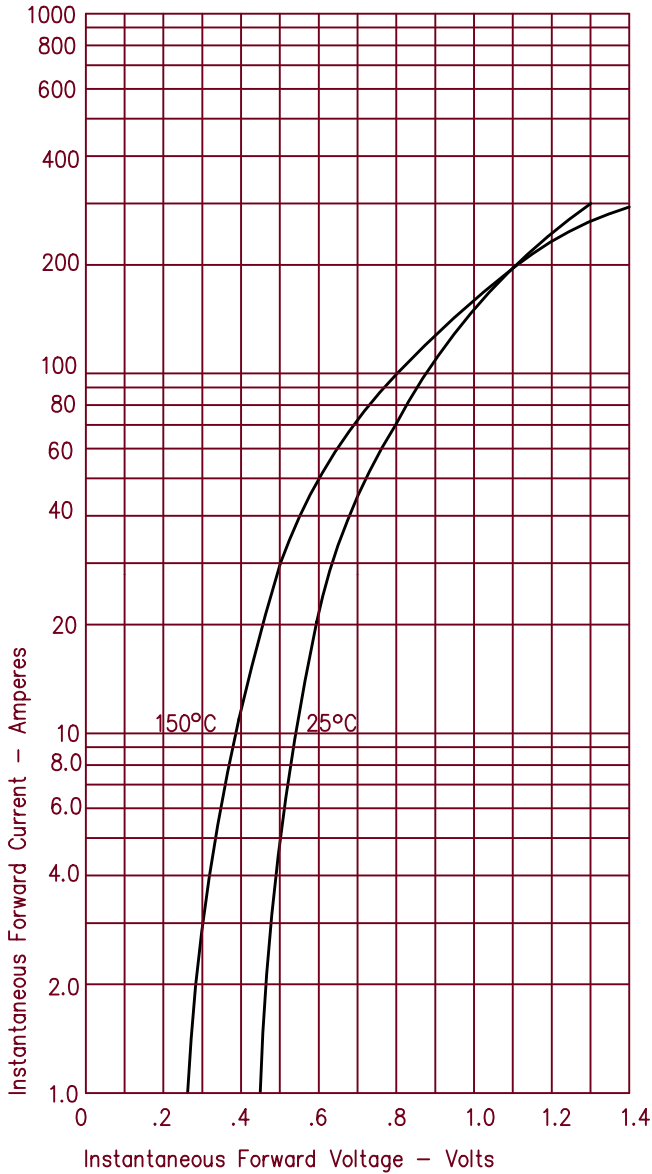


Figure 3  
Typical Junction Capacitance

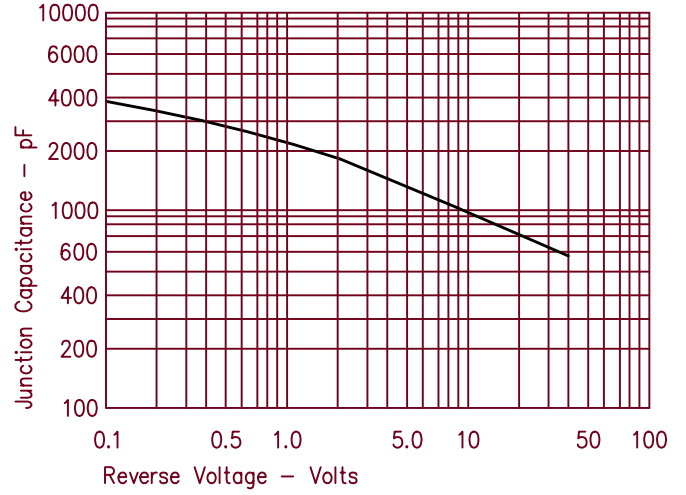


Figure 4  
Forward Current Derating

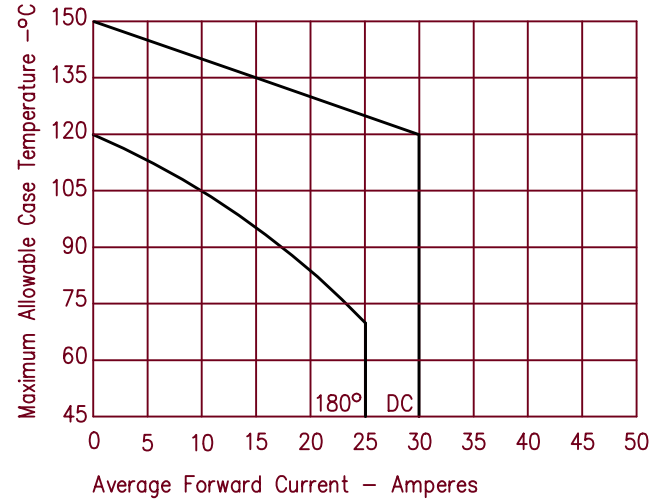


Figure 2  
Typical Reverse Characteristics

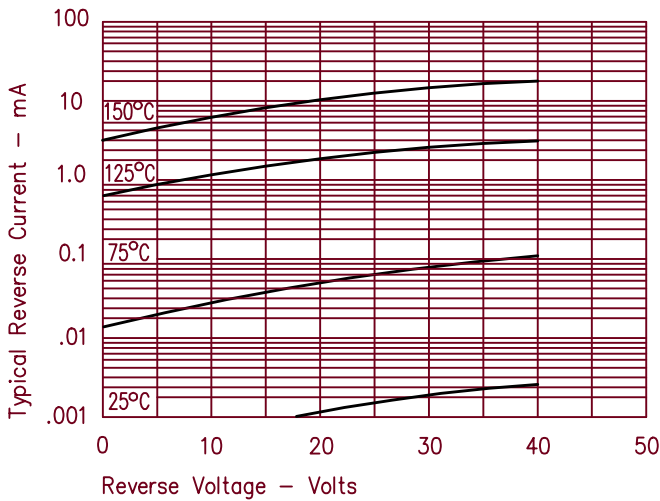


Figure 5  
Maximum Forward Power Dissipation

