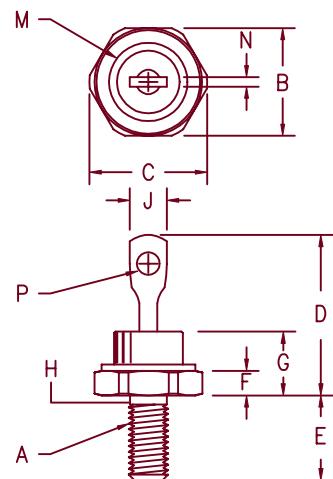


15 Amp Schottky Rectifier

1N5826 — 1N5828



Notes:

1. 10-32 UNF3A threads
2. Full threads within 2 1/2 threads
3. Standard Polarity:
Stud is Cathode
Reverse Polarity: Stud is Anode

Dim.	Inches		Millimeter		Notes
	Minimum	Maximum	Minimum	Maximum	
A	---	---	---	---	1
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	2
J	---	.310	---	7.87	
M	---	.350	---	8.89	Dia.
N	.020	.065	.510	1.65	
P	.060	.100	1.53	2.54	Dia.

D0203AA (D04)

Microsemi
Catalog Number

Working Peak
Reverse Voltage

Repetitive Peak
Reverse Voltage

1N5826
1N5827
1N5828

20V
30V
40V

20V
30V
40V

*Add the Suffix R for Reverse Polarity

- Schottky Barrier Rectifier
- Guard Ring Protection
- Low Forward Voltage
- V_{RRM} – 20 to 40V
- 15 Amperes
- Reverse Energy Tested

Electrical Characteristics

Average forward current

$I_{F(AV)}$ 15 Amps

$T_C = 117^\circ\text{C}$, Square wave, $R_{\theta JC} = 1.6^\circ\text{C}/\text{W}$

Maximum surge current

I_{FSM} 600 Amps

8.3 ms, half sine $T_J = 150^\circ\text{C}$

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—1N5826

V_{FM} .67 Volts

$I_{FM} = 40\text{A}; T_J = 25^\circ\text{C}^*$

Max peak forward voltage—1N5827

V_{FM} .77 Volts

$I_{FM} = 40\text{A}; T_J = 25^\circ\text{C}^*$

Max peak forward voltage—1N5828

V_{FM} .87 Volts

$I_{FM} = 40\text{A}; T_J = 25^\circ\text{C}^*$

Max peak reverse current

I_{RM} 2 mA

$V_{RRM}, T_J = 25^\circ\text{C}$

Typical junction capacitance

C_J 1200 pF

$V_R = 5.0\text{V}, T_J = 25^\circ\text{C}$

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

Thermal and Mechanical Characteristics

Storage temp range

T_{STG}

-55°C to 175°C

Operating junction temp range

T_J

-55°C to 150°C

Max thermal resistance

$R_{\theta JC}$

1.6 °C/W Junction to case

Typical thermal resistance (greased)

$R_{\theta CS}$

0.5 °C/W Case to sink

Mounting torque

12–15 inch pounds

Weight

0.2 ounces (6.0 grams) typical

1N5826 — 1N5828

[查询"1N5826"供应商](#)

Figure 1
Typical Forward Characteristics

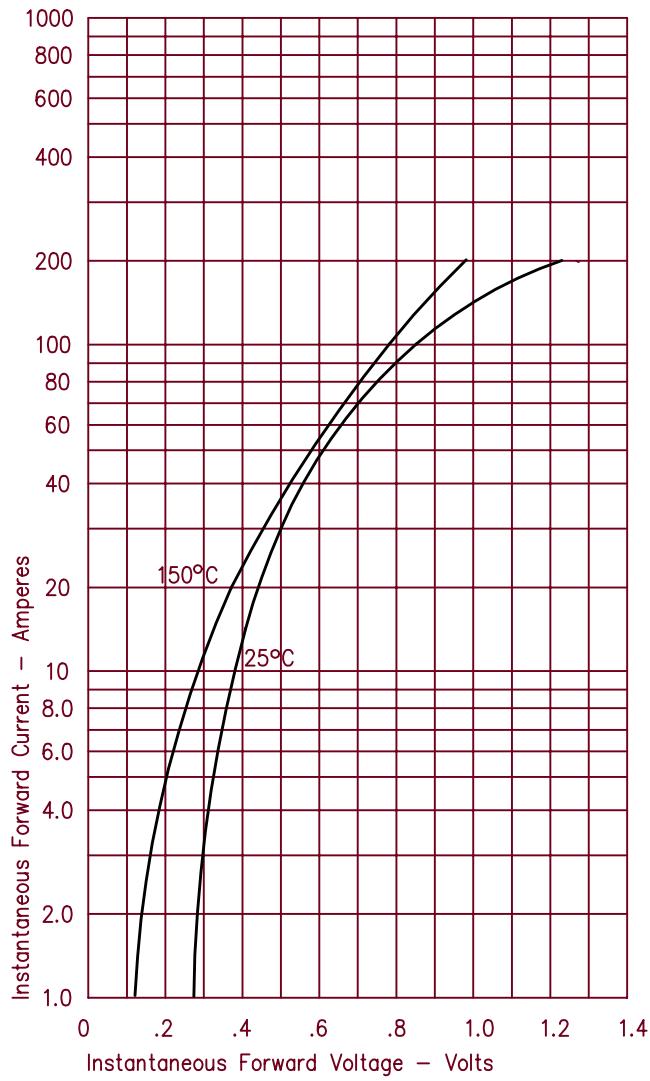


Figure 2
Typical Reverse Characteristics

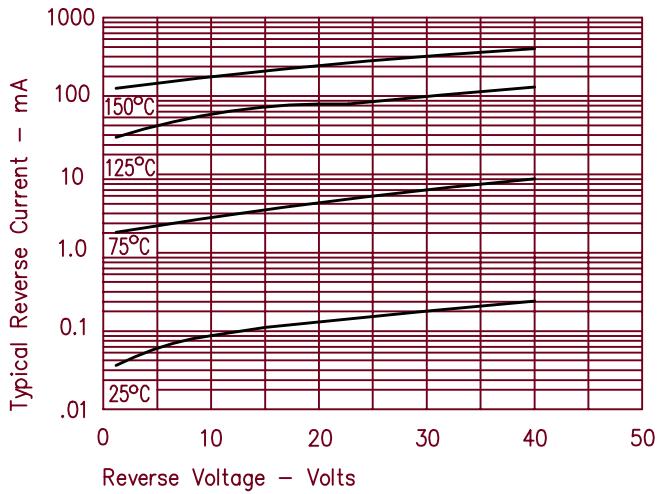


Figure 3
Typical Junction Capacitance

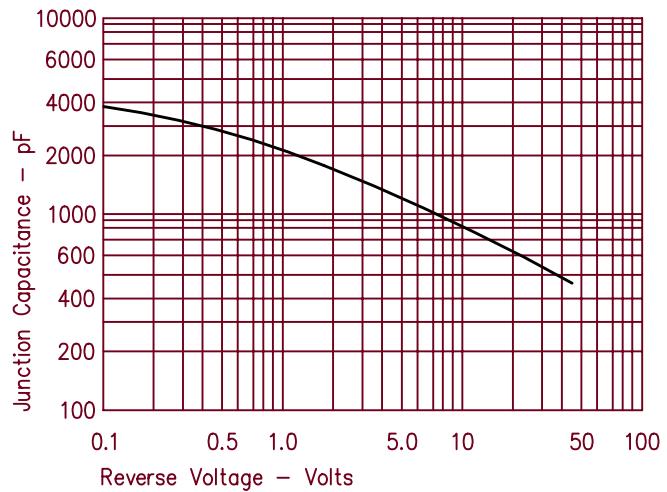


Figure 4
Forward Current Derating

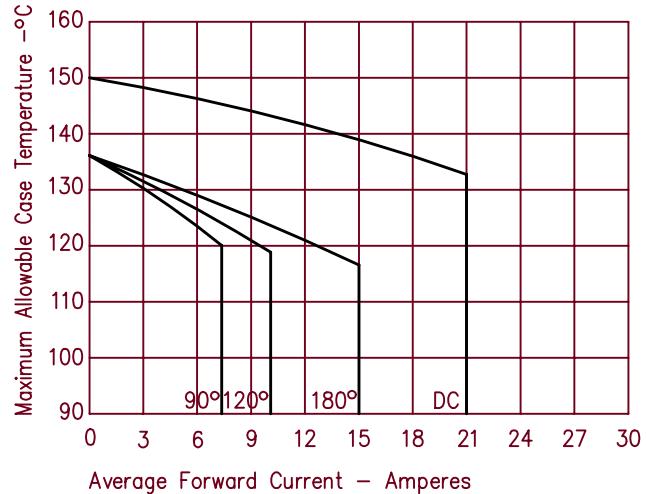


Figure 5
Maximum Forward Power Dissipation

