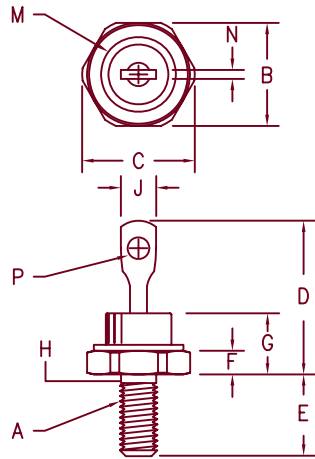


15 Amp Schottky Rectifier

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	20V	20V
1N5827	30V	30V
1N5828	40V	40V

*Add the Suffix R for Reverse Polarity

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

Electrical Characteristics

Average forward current	I _{F(AV)} 15 Amps	T _C = 117°C, Square wave, R _{θJC} = 1.6°C/W 8.3 ms, half sine T _J = 150°C f = 1 KHz, 25°C, 1 μsec Square wave
Maximum surge current	I _{FSM} 600 Amps	
Max repetitive peak reverse current	I _{R(OV)} 2 Amps	
Max peak forward voltage—1N5826	V _{FM} .67 Volts	I _{FM} = 40A: T _J = 25°C*
Max peak forward voltage—1N5827	V _{FM} .77 Volts	I _{FM} = 40A: T _J = 25°C*
Max peak forward voltage—1N5828	V _{FM} .87 Volts	I _{FM} = 40A: T _J = 25°C*
Max peak reverse current	I _{RM} 2 mA	V _{RRM} , T _J = 25°C
Typical junction capacitance	C _J 1200 pF	V _R = 5.0V, T _J = 25°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 _{θJC}	1.6°C/W Junction to case
Typical thermal resistance (greased)	R _{θCS}	0.5°C/W Case to sink
Mounting torque		12-15 inch pounds
Weight		0.2 ounces (6.0 grams) typical



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Figure 1
Typical Forward Characteristics

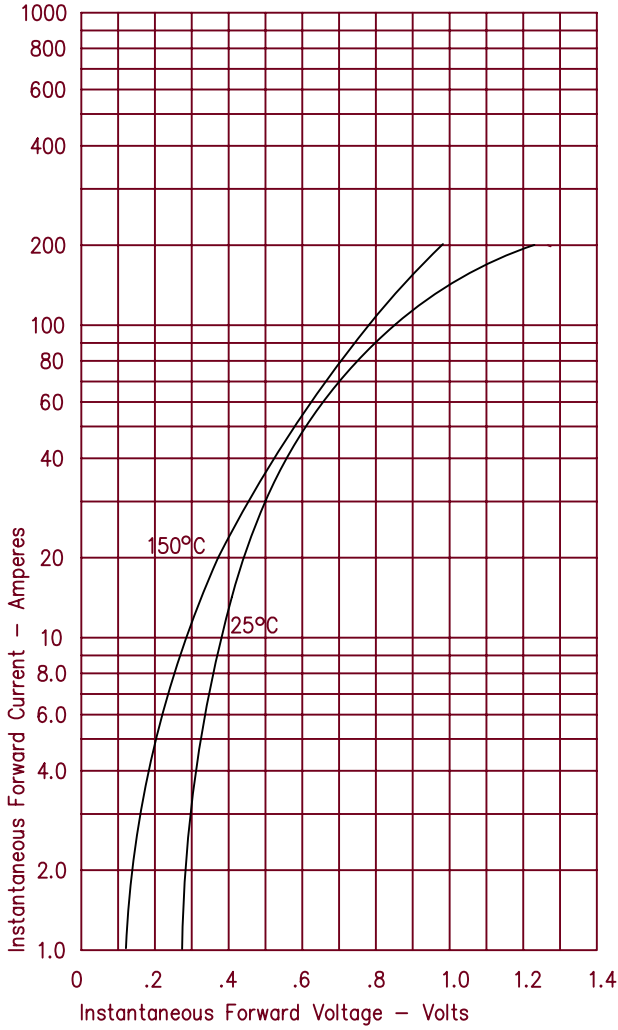


Figure 3
Typical Junction Capacitance

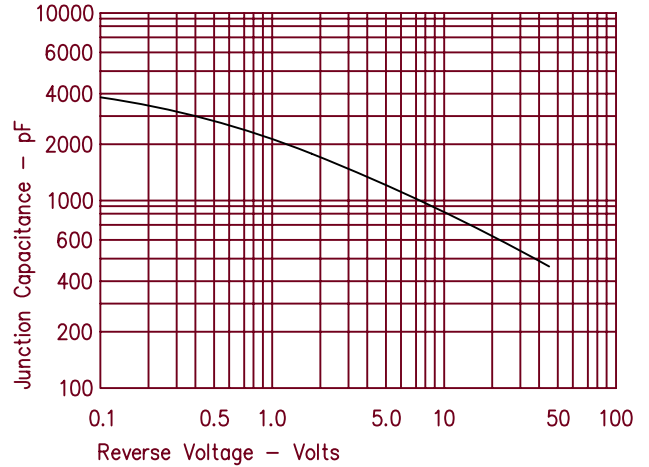


Figure 4
Forward Current Derating

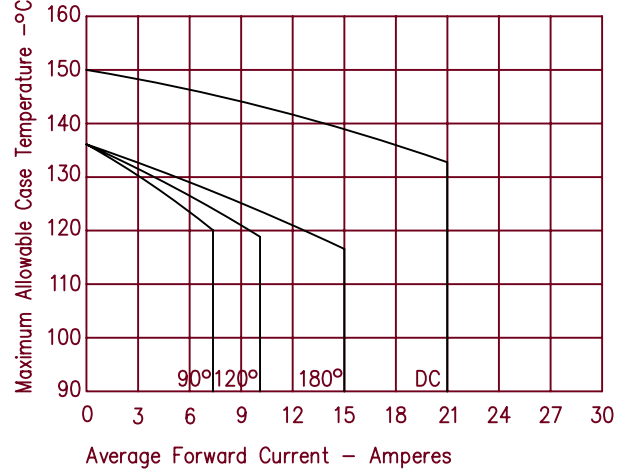


Figure 2
Typical Reverse Characteristics

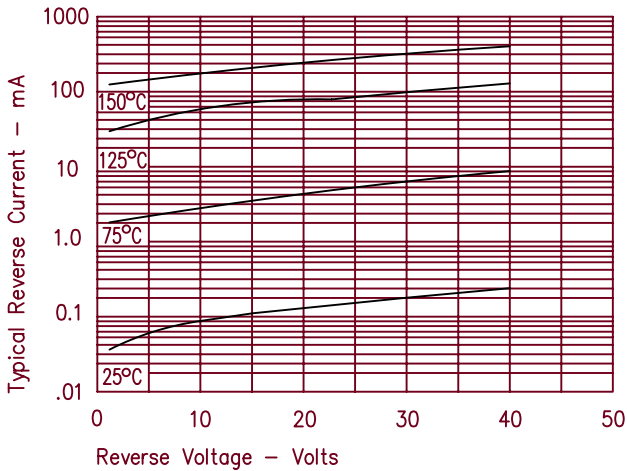


Figure 5
Maximum Forward Power Dissipation

