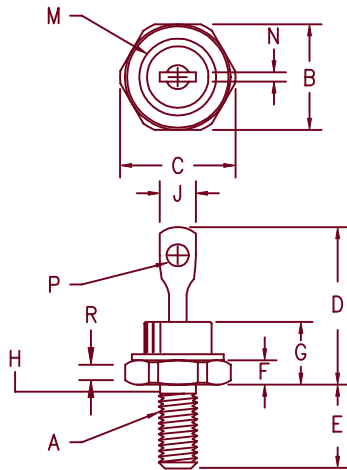


Military Schottky Rectifier 1N6391



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

Dim.	Inches		Millimeter		Notes
	Minimum	Maximum	Minimum	Maximum	
A	---	---	---	---	1
B	.424	.437	10.77	11.10	
C	---	.505	---	12.82	
D	.600	.800	15.22	20.32	
E	.422	.453	10.72	11.50	
F	.075	.175	1.91	4.44	
G	.300	.405	7.62	10.28	
H	.163	.189	4.14	4.80	2
J	---	.250	---	6.35	
M	---	.350	---	8.89	Dia.
N	.018	.065	.460	1.65	
P	.060	.103	1.52	2.62	Dia.
R	.060	---	1.53	---	

D0203AA (D04)

Microsemi Catalog Number	Working Peak Reverse Voltage	Repetitive Peak Reverse Voltage
1N6391	45V	45V

- Schottky Barrier Rectifier
- Available in JAN, JANTX, JANTXV, JANS
- Mil-PRF-19500/553
- Low Forward Voltage
- 600 Amps surge rating
- Reverse Energy Tested

Electrical Characteristics

Average forward current	I _{F(AV)} 25 Amps	T _C = 125°C, Square wave, R _{θJC} = 2.0°C/W
Maximum surge current	I _{FSM} 600 Amps	8.3 ms, half sine, T _J = 175°C
Max reverse energy	I _{R(OV)} 2 Amps	L = 260μH, ≤ 1% Duty Cycle
Max peak forward voltage	V _{FM} .50 Volts	I _{FM} = 5A: T _J = 25°C*
Max peak forward voltage	V _{FM} .68 Volts	I _{FM} = 50A: T _J = 25°C*
Max peak reverse current	I _{RM} 15 mA	V _{RRM} , T _J = 25°C
Max peak reverse current	I _{RM} 40 mA	V _{RRM} , T _J = 125°C*
Max peak reverse current	I _{RM} 400 mA	V _{RRM} , T _J = 175°C*
Maximum junction capacitance	C _J 2000 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 175°C
Max thermal resistance	R _{θJC}	2.0°C/W Junction to case
Mounting torque		15 inch pounds maximum
Weight		.16 ounces (5.0 grams) typical

MILITARY

1N6391

Figure 1
Typical Forward Characteristics

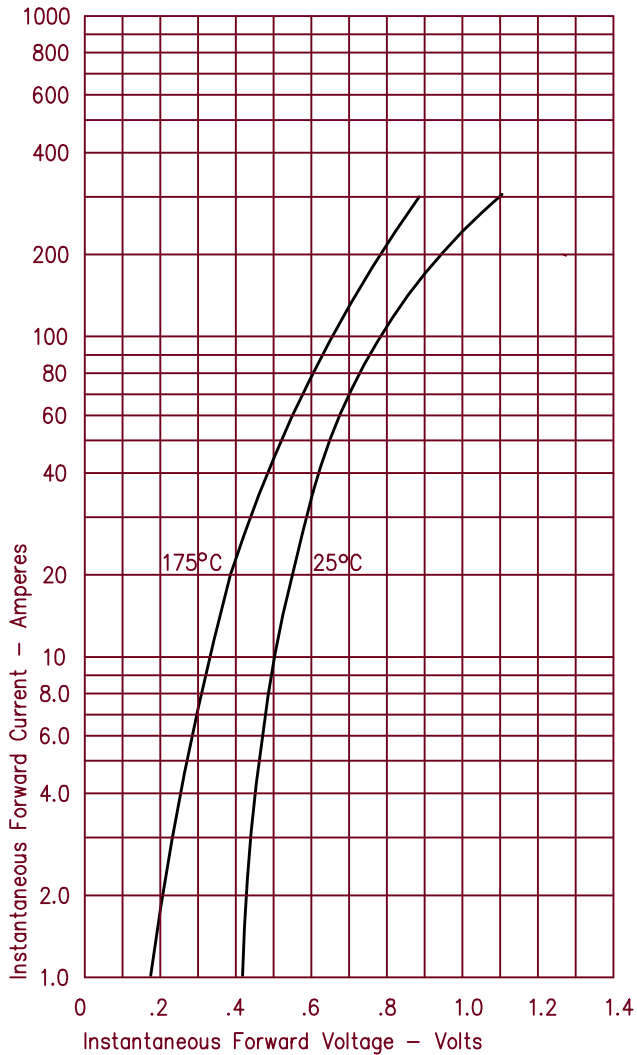


Figure 3
Typical Junction Capacitance

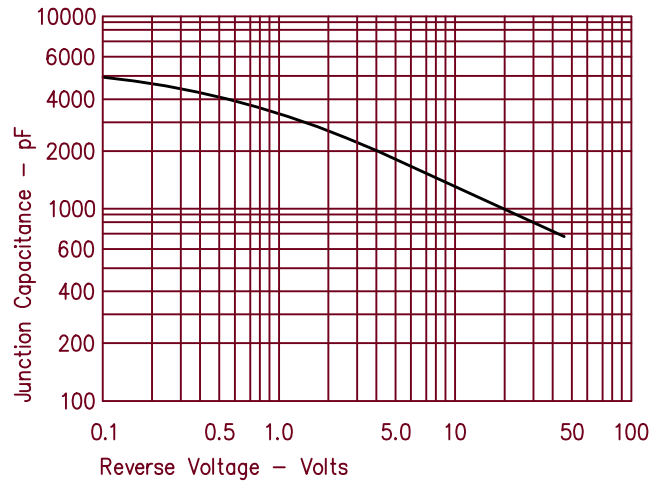


Figure 4
Forward Current Derating

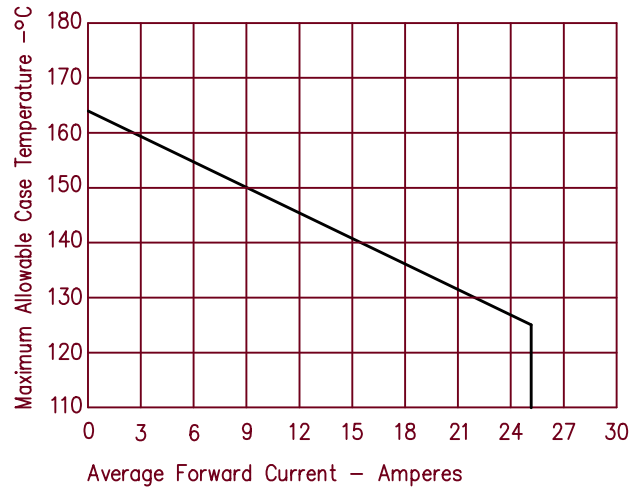


Figure 2
Typical Reverse Characteristics

