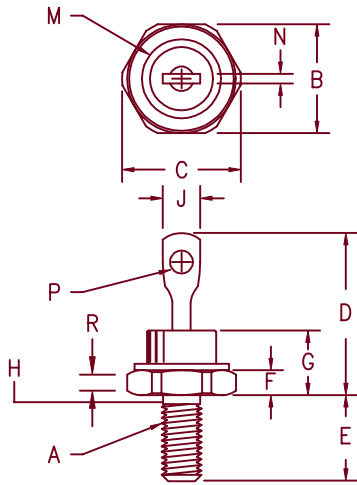


Military Schottky Rectifier 1N6391



- 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
- Mil-PRF-19500/553
- Low Forward Voltage
- 600 Amps surge rating
- Reverse Energy Tested

Electrical Characteristics

Average forward current	$I_{F(AV)}$ 25 Amps	$T_C = 125^\circ\text{C}$, Square wave, $R_{\theta JC} = 2.0^\circ\text{C/W}$
Maximum surge current	I_{FSM} 600 Amps	8.3 ms, half sine, $T_J = 175^\circ\text{C}$
Max reverse energy	$I_{R(OV)}$ 2 Amps	$L = 260\mu\text{H}$, $\leq 1\%$ Duty Cycle
Max peak forward voltage	V_{FM} .50 Volts	$I_{FM} = 5\text{A}$: $T_J = 25^\circ\text{C}^*$
Max peak forward voltage	V_{FM} .68 Volts	$I_{FM} = 50\text{A}$: $T_J = 25^\circ\text{C}^*$
Max peak reverse current	I_{RM} 15 mA	V_{RRM} , $T_J = 25^\circ\text{C}$
Max peak reverse current	I_{RM} 40 mA	V_{RRM} , $T_J = 125^\circ\text{C}^*$
Max peak reverse current	I_{RM} 400 mA	V_{RRM} , $T_J = 175^\circ\text{C}^*$
Maximum junction capacitance	C_J 2000 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 175°C
Max thermal resistance	$R_{\theta JC}$	2.0°C/W Junction to case
Mounting torque		15 inch pounds maximum
Weight		.16 ounces (5.0 grams) typical

1N6391

Figure 1
Typical Forward Characteristics

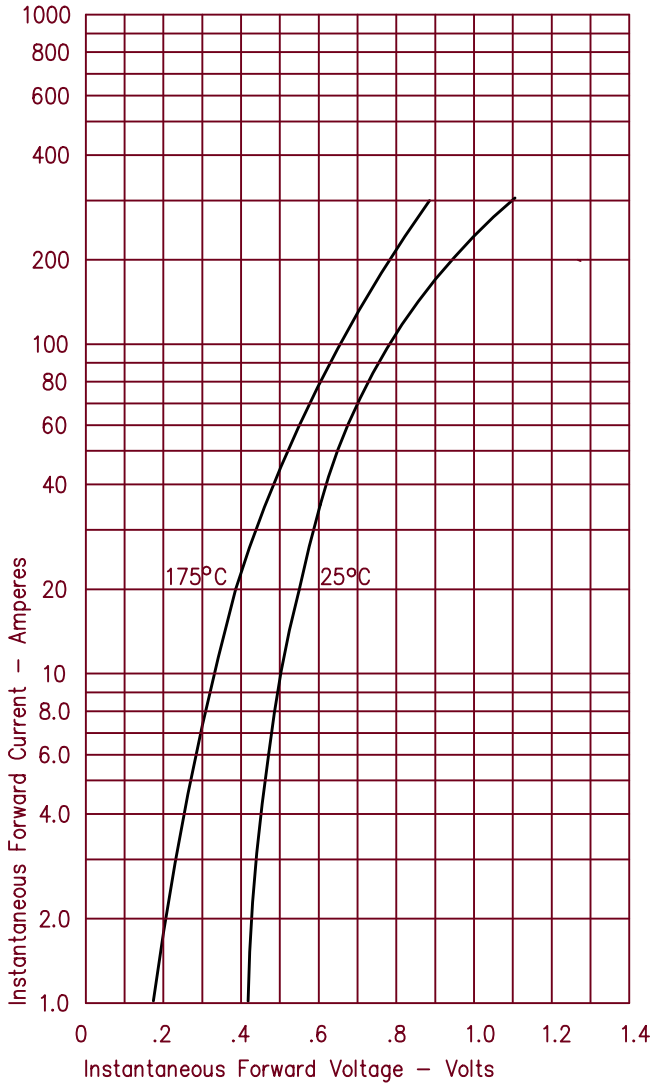


Figure 3
Typical Junction Capacitance

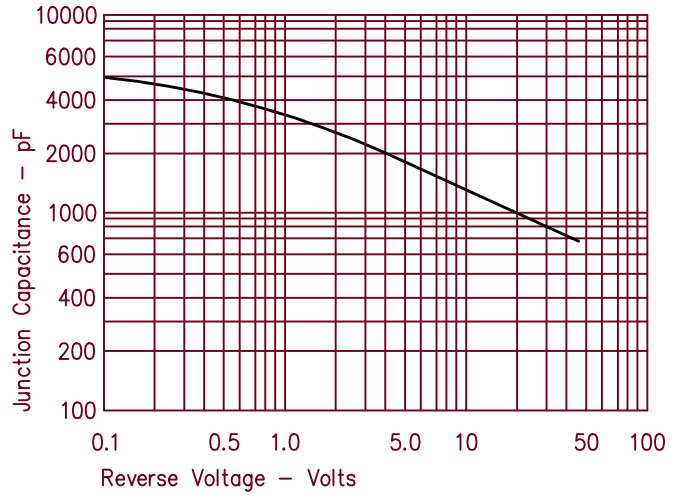


Figure 4
Forward Current Derating

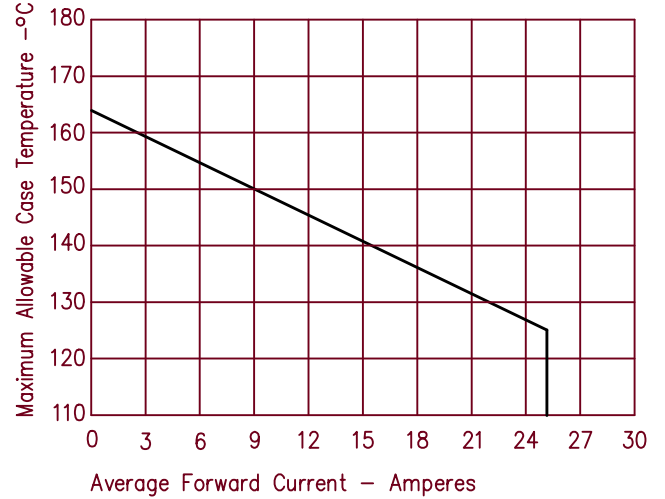


Figure 2
Typical Reverse Characteristics

