DIGITRON SEMICONDUCTORS

1N1199(A,B)-1N1206(A,B) SILICON POWER RECTIFIER

MAXIMUM RATINGS

Parameter	Symbol	1N1199	1N1200	1N1201	1N1202	1N1203	1N1204	1N1205	1N1206
Peak reverse voltage	V_R	50V	100V	150V	200V	300V	400V	500V	600V
Operating & storage temperature range	T_J, T_{stg}	-65 to +200°C							
Maximum thermal resistance	$R_{\theta JC}$	2.5°C/W junction to case							
Mounting torque		25-30 inch pounds							
Weight		.16 ounces (5.0 grams) typical							

Add "R" to part numbers for reverse polarity.

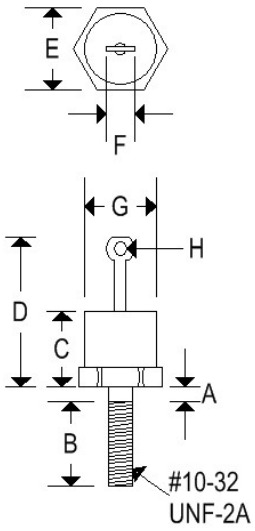
ELECTRICAL CHARACTERISTICS

Parameter	Symbol	Value	Test Condition
Average forward current	$I_{F(AV)}$	12 Amps	T_C = 170°C, half-sine wave, $R_{\theta JC}$ = 2.5°C/W
Maximum surge current	I_{FSM}	250 Amps	8.3ms, half-sine, T_J = 200°C
Maximum I^2t for fusing	I^2t	260 A^2s	
Maximum peak forward voltage	V_{FM}	1.2 Volts	I_{FM} = 30A: T_J = 25°C*
Maximum peak reverse current	I_{RM}	10 µA	V_{RRM}, T_J = 25°C
Maximum peak reverse current	I_{RM}	1.0 mA	V_{RRM}, T_J = 150°C*
Maximum recommended operating frequency		10 kHz	

- Pulse test: pulse width 300µsec. Duty cycle 2%

MECHANICAL CHARACTERISTICS

Case	DO-4(R)
Marking	Alpha numeric
Normal polarity	Cathode is stud, reverse polarity = anode is stud
Reverse polarity	Anode is stud (add "R" suffix)



	DO-4(R)			
	Inches		Millimeters	
	Min	Max	Min	Max
A	-	0.078	-	1.981
B	0.422	0.453	10.719	11.506
C	-	0.405	-	10.287
D	-	0.800	-	20.320
E	0.420	0.440	10.668	11.176
F	-	0.250	-	6.350
G	-	0.424	-	10.770
H	0.066	-	1.676	-

Available Non-RoHS (standard) or RoHS compliant (add PBF suffix).
Available as "HR" (high reliability) screened per MIL-PRF-19500, JANTX level. Add "HR" suffix to base part number.

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Rev. 20121127

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Figure 1
Typical Forward Characteristics

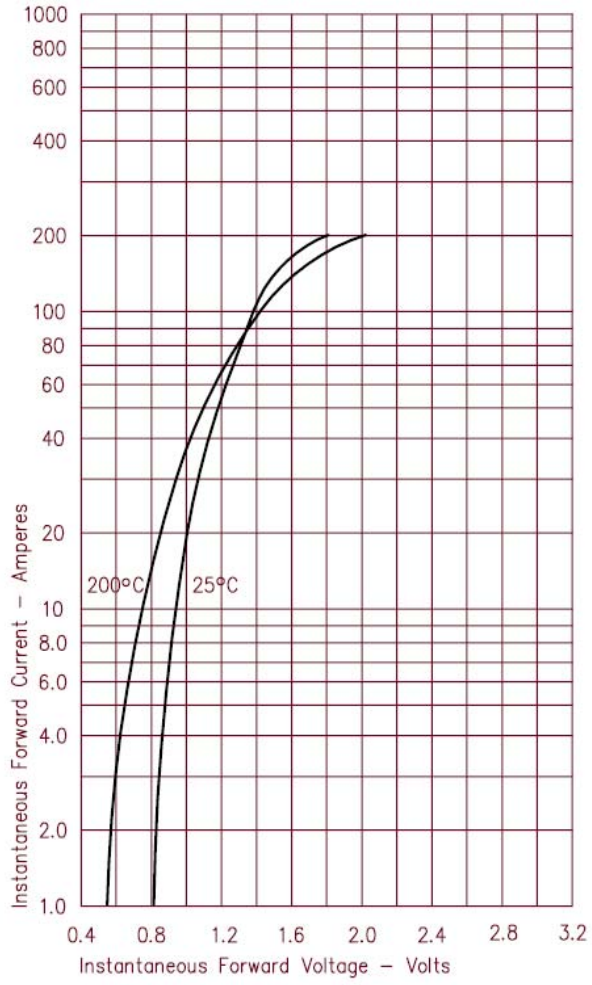


Figure 3
Forward Current Derating

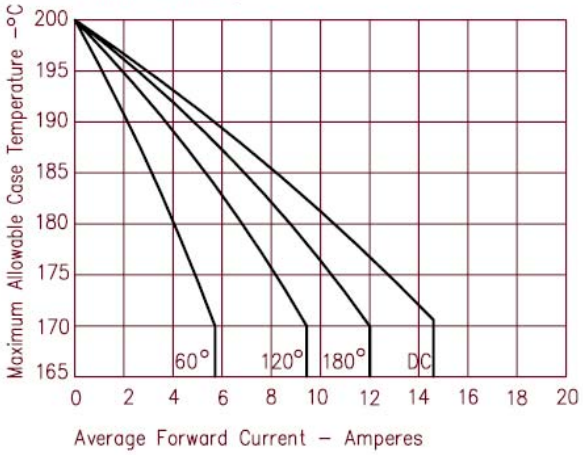


Figure 4
Maximum Forward Power Dissipation

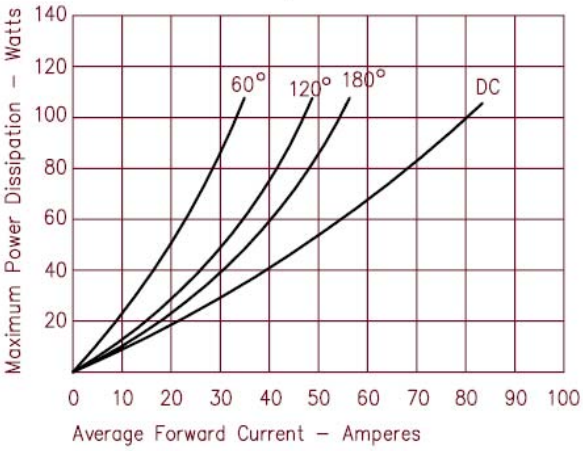


Figure 2
Typical Reverse Characteristics

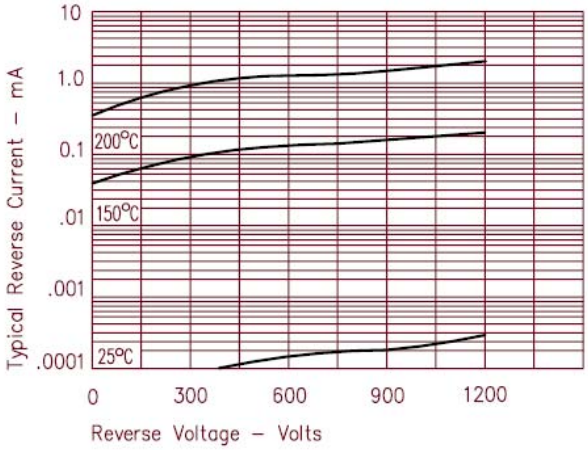
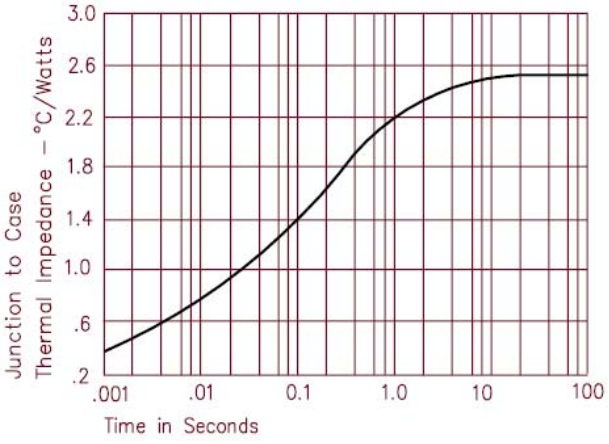


Figure 5
Transient Thermal Impedance



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