

DIGITRON SEMICONDUCTORS

1N5802-1N5806
1N5807-1N5811
1N5812-1N5816

RECTIFIERS HIGH EFFICIENCY
2.5 AMP TO 20 AMP

MAXIMUM RATINGS

Peak Inverse Voltage	2.5 Amp Series	6 Amps Series	20 Amp Series
50V	1N5802	1N5807	1N5812
75V	1N5803	1N5808	1N5813
100V	1N5804	1N5809	1N5814
125V	1N5805	1N5810	1N5815
150V	1N5806	1N5811	1N5816

	2.5 Amp Series	6.0 Amp Series	20 Amp Series
Maximum Average D.C. Output Current @T _L =75°C, L=¾"	2.5A	6.0A	--
@T _C =100°C			20.0A
Non-Repetitive Sinusoidal Surge Current (8.3ms)	35A	125A	250A
Operating and Storage Temperature Range	-65°C to +175°C		
Thermal Resistance 2.5A and 6A Series 20A Series	See Lead Temperature Derating Curve 3.0°C/W		

ELECTRICAL CHARACTERISTICS (@ 25°C unless noted)

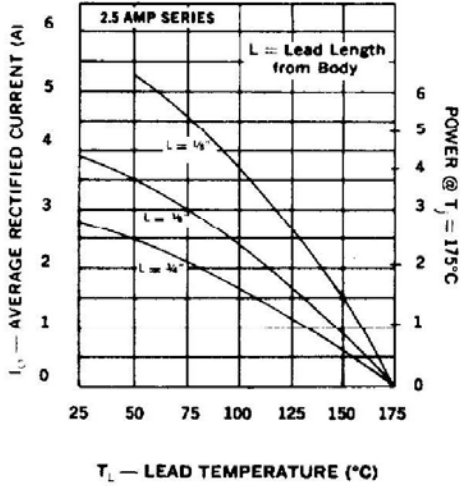
PART NUMBER	PIV	MAXIMUM FORWARD VOLTAGE DROP	LEAKAGE CURRENT @ PIV		MAXIMUM REVERSE RECOVERY TIME I _{F1} I _{G1} I _{REC}	TYPICAL FORWARD RECOVERY TIME @ 1A Recover to 1V	TYPICAL FORWARD RECOVERY VOLTAGE @1A tr=8ns	TYPICAL JUNCTION CAPACITANCE @ -10V
			25°C	100°C				
1N5802 1N5803 1N5804 1N5805 1N5806	50V 75V 100V 125V 150V	.875 @ 1A	1µA	50µA	25ns, 0.5A-0.5A-0.05A	15ns	1.5V	15pf
1N5807 1N5808 1N5809 1N5810 1N5811	50V 75V 100V 125V 150V	.875 @ 4A	5µA	150µA	30ns, 1.0-1.0-0.1A	15ns	1.5v	45pf
1N5812 1N5813 1N5814 1N5815 1N5816	50V 75V 100V 125V 150V	.900 @ 10A	10µA	750µA	35ns, 1.0-1.0-0.1A	15ns	1.5V	200pf

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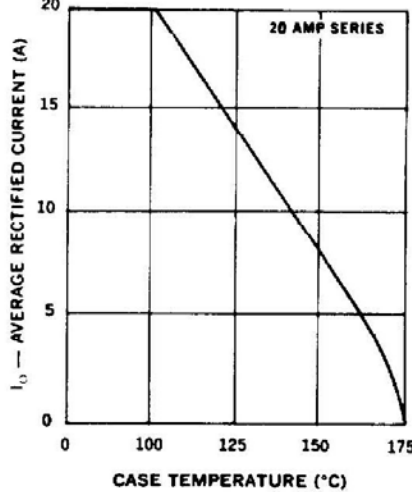
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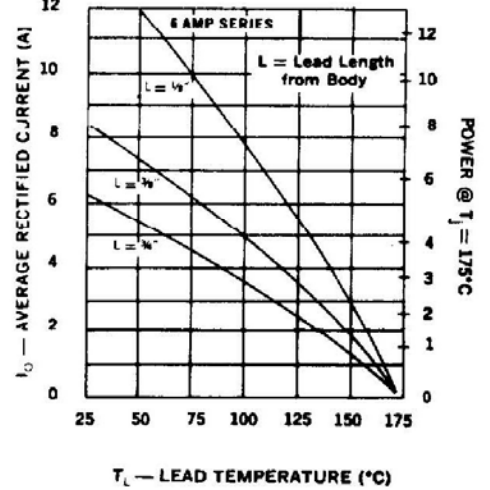
Output Current vs. Lead Temp.



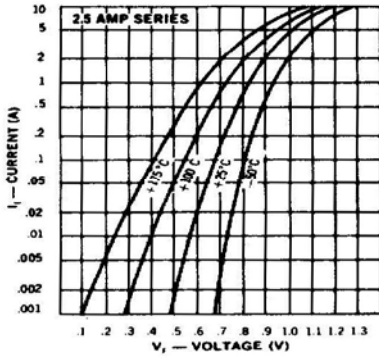
Output Current vs. Case Temp.



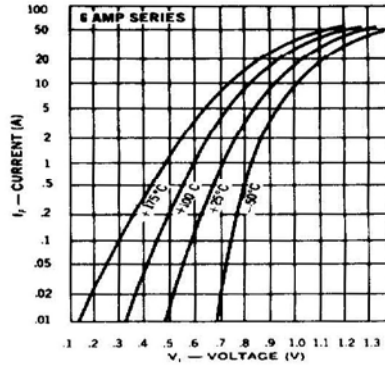
Output Current vs. Lead Temp.



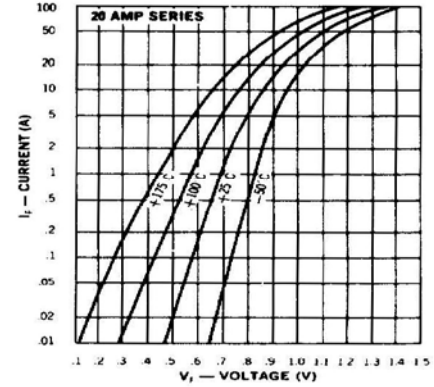
Typical Forward Current vs. Forward Voltage



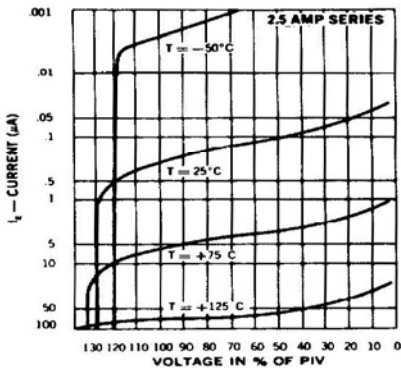
Typical Forward Current vs. Forward Voltage



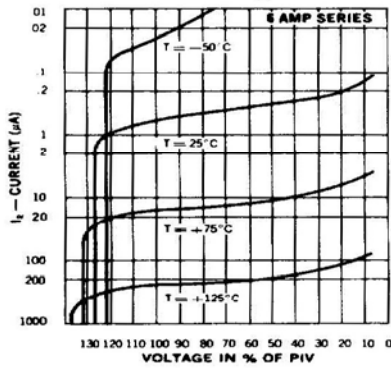
Typical Forward Current vs. Forward Voltage



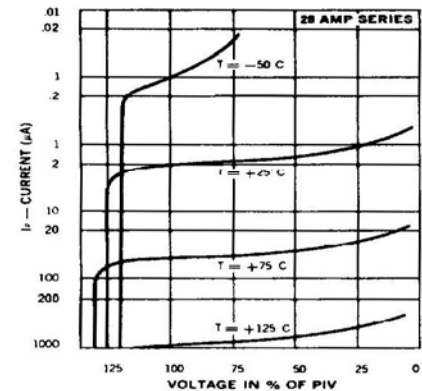
Typical Reverse Current vs. Voltage



Typical Reverse Current vs. Voltage



Typical Reverse Current vs. Voltage



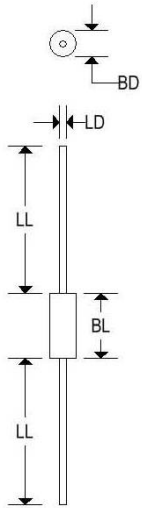
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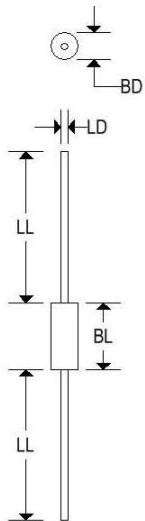
MECHANICAL CHARACTERISTICS

1N5802-1N5806	
Case:	Digi A
Marking:	Alpha Numeric
Polarity:	Cathode Band



	Digi A			
	Inches		Millimeters	
	Min	Max	Min	Max
BD	-	0.095	-	2.413
BL	-	0.180	-	4.572
LD	0.028	0.032	0.711	0.813
LL	0.700	-	17.800	-

1N5807-1N5811	
Case:	Digi B
Marking:	Alpha Numeric
Polarity:	Cathode Band



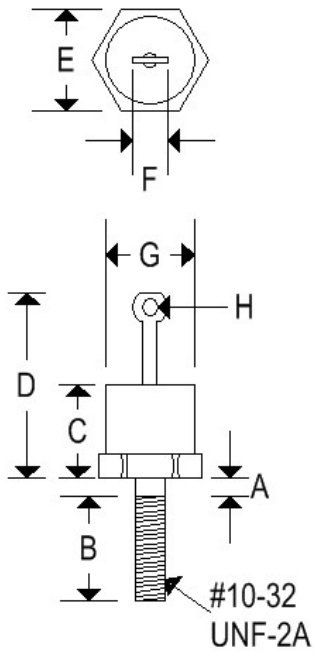
	Digi B			
	Inches		Millimeters	
	Min	Max	Min	Max
BD	-	0.142	-	3.607
BL	-	0.250	-	6.350
LD	0.038	0.042	0.965	1.067
LL	0.975	-	24.765	-

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1N5812-1N5816	
CASE	HERMETICALLY SEALED METAL AND GLASS
MARKING	BODY PAINTED, ALPHA NUMERIC
POLARITY	CATHODE TO STUD



	DO-4			
	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.