

DIGITRON SEMICONDUCTORS

MR2400-MR2410

RECOVERY RECTIFIER

24 AMP, 50-1000V

MAXIMUM RATINGS

Operating & Storage Temperature	-65°C to +150°C		
Maximum Thermal Resistance	10°C/W Junction to Ambient		
Type	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
MR2400	50V	35V	50V
MR2401	100V	70V	100V
MR2402	200V	140V	200V
MR2404	400V	280V	400V
MR2406	600V	420V	600V
MR2408	800V	560V	800V
MR2410	1000V	700V	1000V

ELECTRICAL CHARACTERISTICS (@ 25°C unless otherwise specified)

Parameter	Symbol	Value	Test Conditions
Average Forward Current	$I_{F(AV)}$	24A	$T_A = 150^\circ\text{C}$
Peak Forward Surge Current	I_{FSM}	400A	8.3ms, half sine
Maximum Instantaneous Forward Voltage	V_F	1.18V	$I_{FM} = 24.0\text{A}$ $T_J = 25^\circ\text{C}^*$
Maximum DC Reverse Current At Rated DC Blocking Voltage	I_R	100 μA	$T_J = 25^\circ\text{C}$
Typical Junction Capacitance	C_J	200pF	Measure at 1.0MHz, $V_R = 4.0\text{V}$

*Pulse Test: Pulse width 300 μsec , Duty cycle 1%

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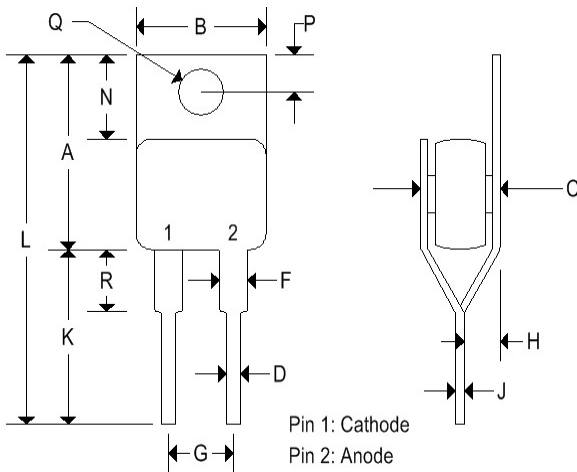
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MECHANICAL CHARACTERISTICS

Case	Digi AA
Pin out	See below
Marking	Alpha-numeric



	Digi AA			
	Inches		Millimeters	
	Min	Max	Min	Max
A	0.560	0.625	14.220	15.88
B	0.380	0.420	9.650	10.670
C	0.284	0.310	7.210	7.870
D	0.025	0.045	0.640	1.140
F	0.060	0.090	1.520	2.290
G	0.170	0.210	4.320	5.330
H	0.080	0.115	2.030	2.920
J	0.023	0.029	0.580	0.740
K	-	0.562	-	14.270
L	-	1.187	-	30.150
N	0.230	0.270	5.840	6.860
P	0.100	0.120	2.5400	3.050
Q	0.139	0.147	3.530	3.730
R	-	0.200	-	5.080

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.

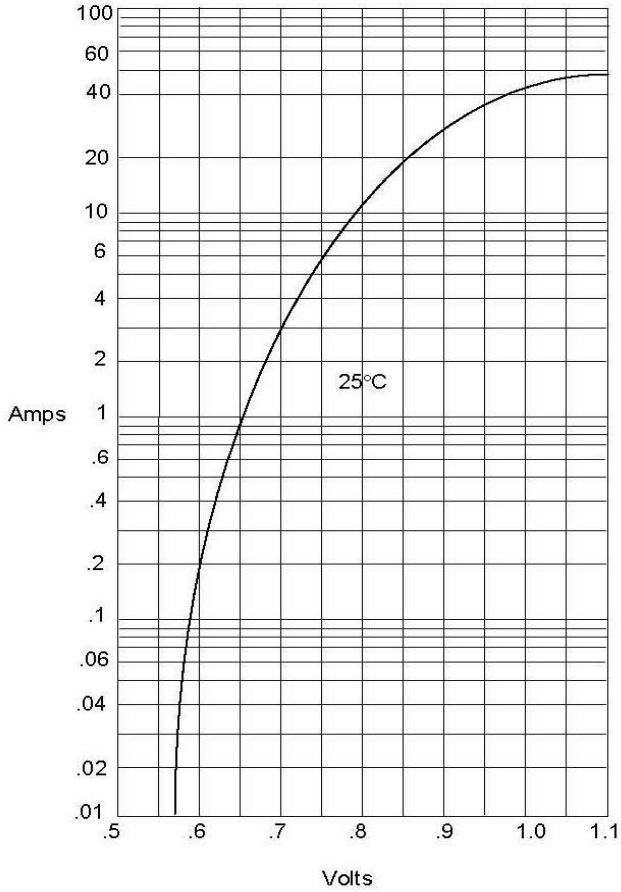
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Figure 1
Typical Forward Characteristics



Instantaneous Forward Current - Amperes versus
Instantaneous Forward Voltage - Volts

Figure 2
Forward Derating Curve

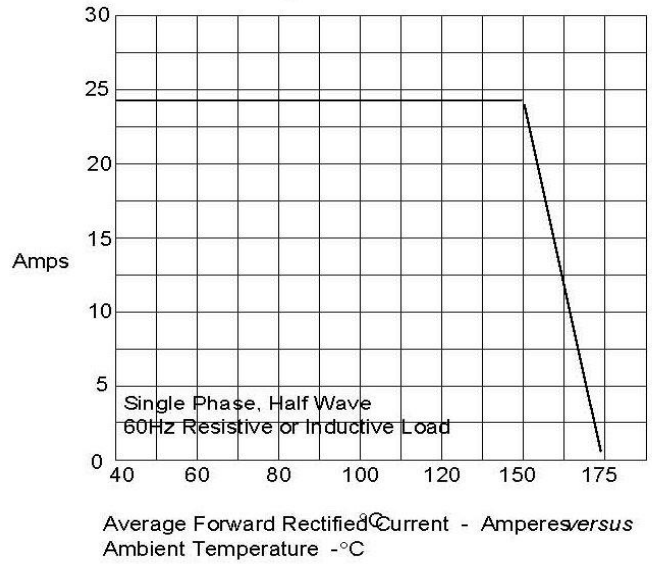
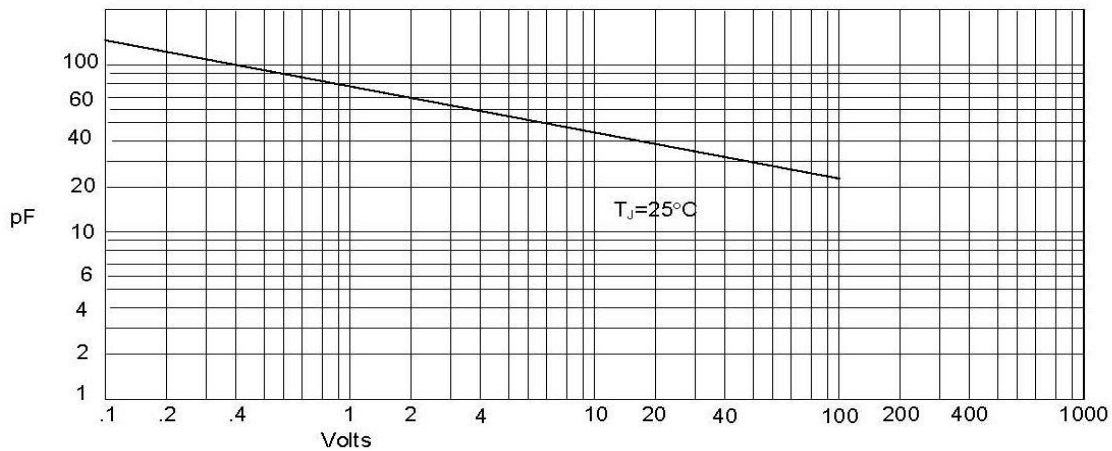


Figure 3
Junction Capacitance



Junction Capacitance - pF versus
Reverse Voltage - Volts

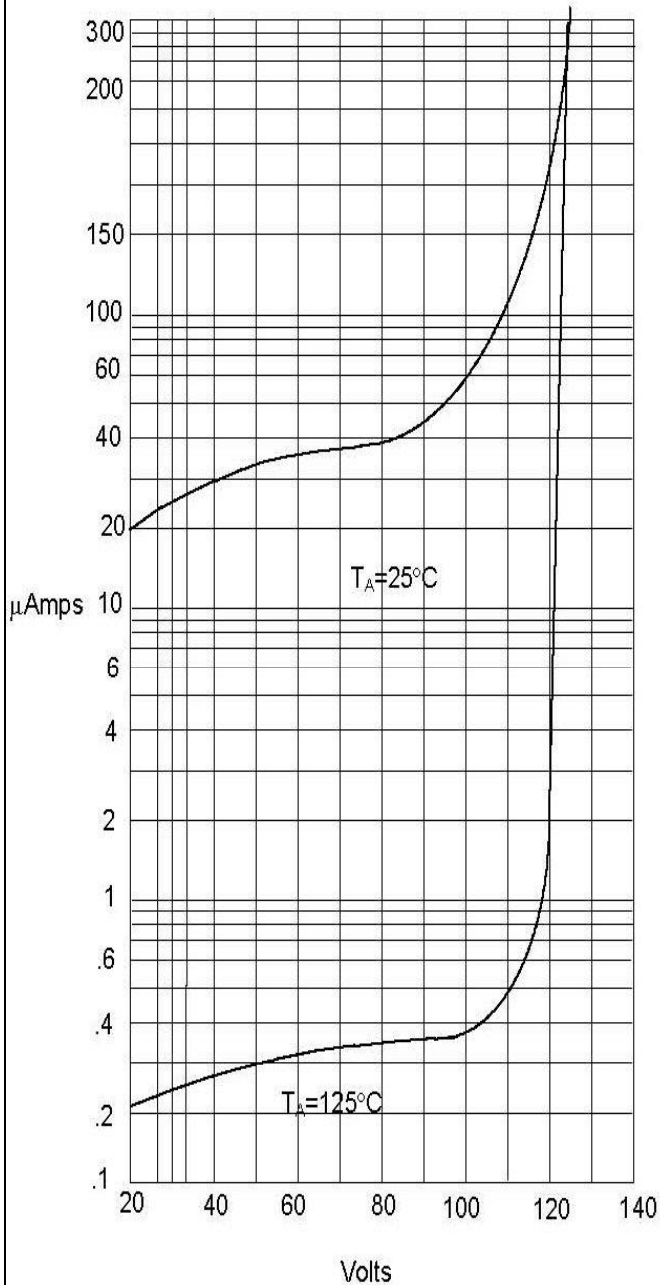
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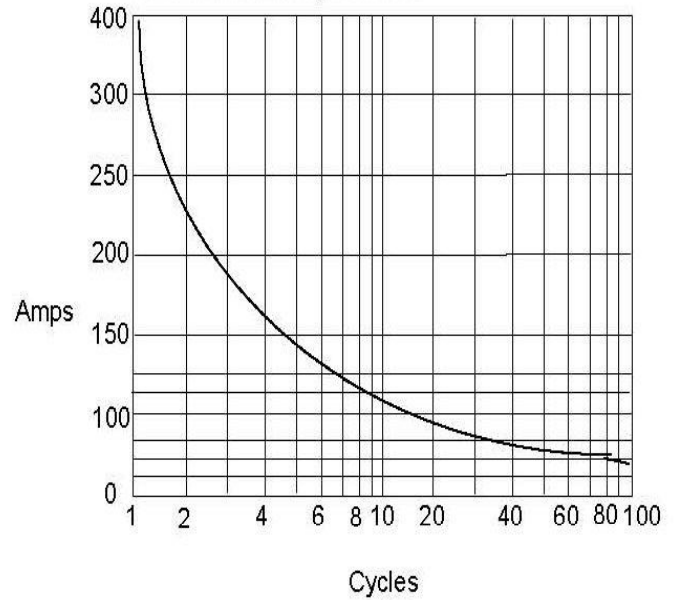
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Figure 4
Typical Reverse Characteristics



Instantaneous Reverse Leakage Current - MicroAmperes versus
Percent Of Rated Peak Reverse Voltage - Volts

Figure 5
Peak Forward Surge Current



Peak Forward Surge Current - Amperes versus
Number Of Cycles At 60Hz - Cycles