

DIGITRON SEMICONDUCTORS

MR2400R-MR2410R

24A STANDARD RECOVERY RECTIFIER

MAXIMUM RATINGS

Rating	Symbol	MR							Unit
		2400R	2401R	2402R	2404R	2406R	2408R	2410R	
Peak repetitive reverse voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS voltage	V_{RMS}	35	70	140	280	420	560	700	
DC blocking voltage	V_R	50	100	200	400	600	800	1000	
Average forward current	$I_{F(AV)}$	24 @ $T_A = 150^\circ\text{C}$							A
Peak forward surge current (8.3ms, half sine)	I_{FSM}	400							A
Operating and storage junction temperature range	T_J, T_{stg}	-65 to +150							$^\circ\text{C}$
Maximum thermal resistance, junction to ambient	$R_{\theta JA}$	10							$^\circ\text{C/W}$

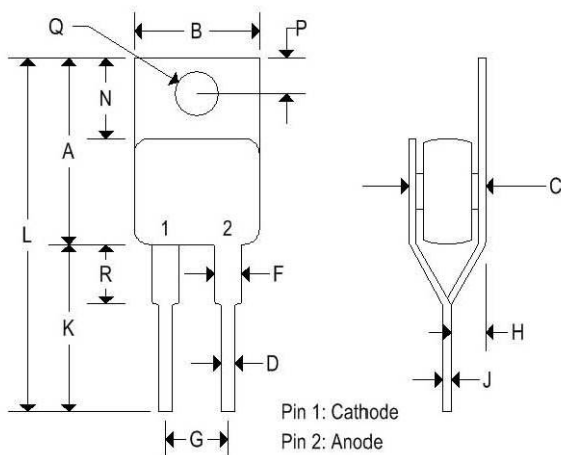
ELECTRICAL CHARACTERISTICS (@ 25°C unless otherwise noted)

Parameter	Symbol	MR							Unit
		2400R	2401R	2402R	2404R	2406R	2408R	2410R	
Maximum instantaneous forward voltage ($I_F = 24\text{A}, T_J = 25^\circ\text{C}$)	V_F	1.18							V
Maximum DC reverse current ⁽¹⁾ (Rated dc voltage, $T_J = 25^\circ\text{C}$)	I_R	100							μA
Typical junction capacitance (measured at 1.0MHz, $V_R = 4.0\text{V}$)	C_J	200							pF

Note 1: Pulse test: Pulse width = 300 μs , duty cycle = 1.0%.

MECHANICAL CHARACTERISTICS

Case	Digi AA
Marking	Alpha-numeric
Pin out	See below



	Digi AA			
	Inches		Millimeters	
	Min	Max	Min	Max
A	0.560	0.625	14.220	15.88
B	0.380	0.420	9.660	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).

144 Market Street
Kenilworth NJ 07033 USA

phone +1.908.245-7200
fax +1.908.245-0555

sales@digitroncorp.com
www.digitroncorp.com

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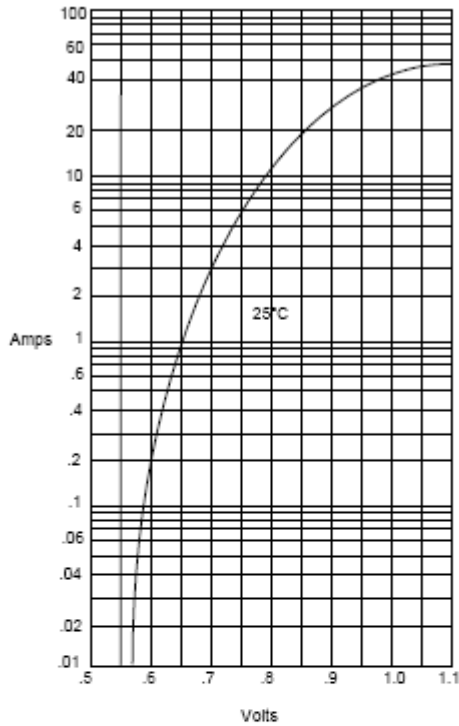
Available as "HR" (high reliability) screened per MIL-PRF-19500, JANTX level. Add "HR" suffix to base part number.

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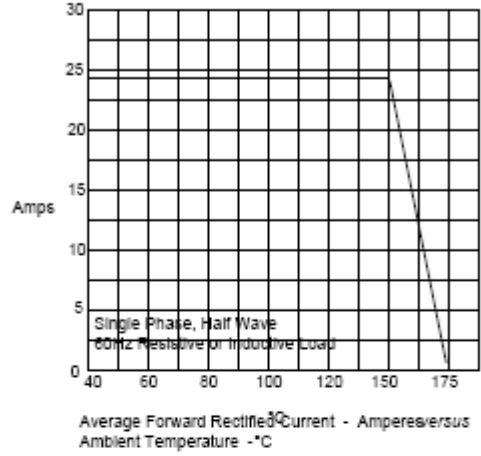
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Figure 1
Typical Forward Characteristics



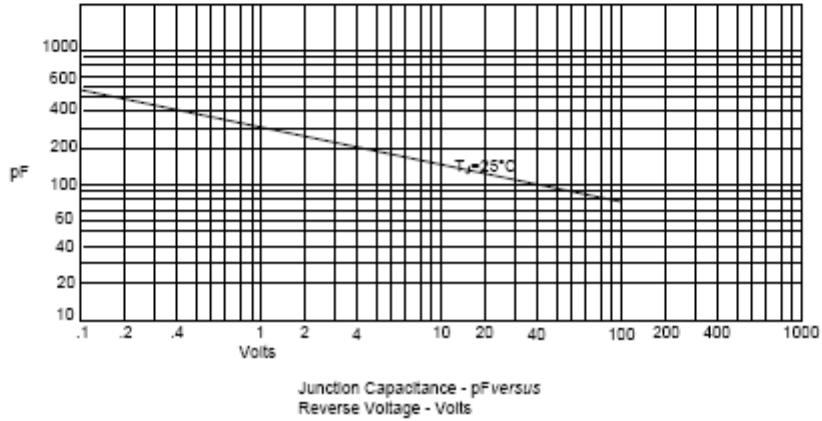
Instantaneous Forward Current - Amperes versus
Instantaneous Forward Voltage - Volts

Figure 2
Forward Derating Curve



Average Forward Rectified Current - Amperes versus
Ambient Temperature - °C

Figure 3
Junction Capacitance



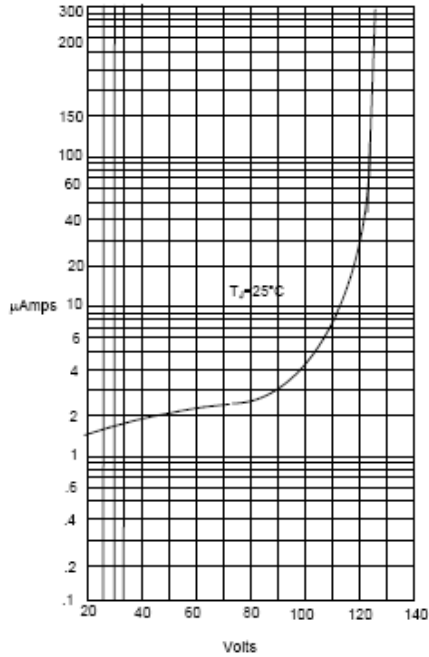
Junction Capacitance - pF versus
Reverse Voltage - Volts

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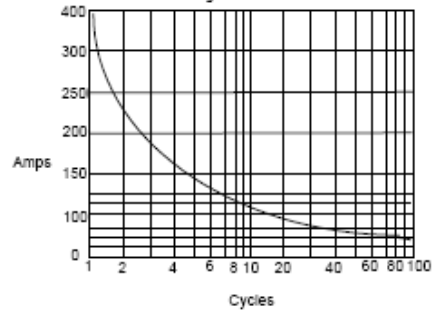
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Figure 4
Typical Reverse Characteristics



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