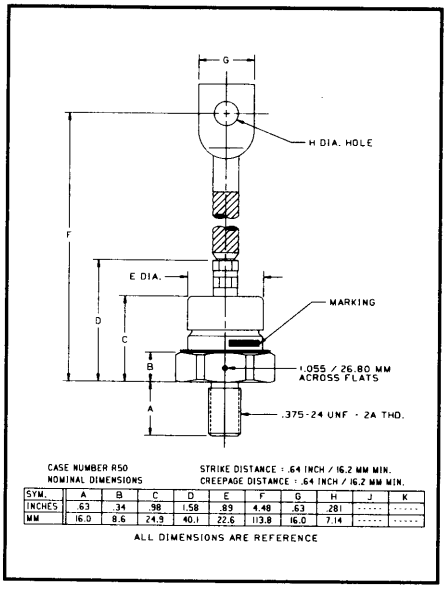
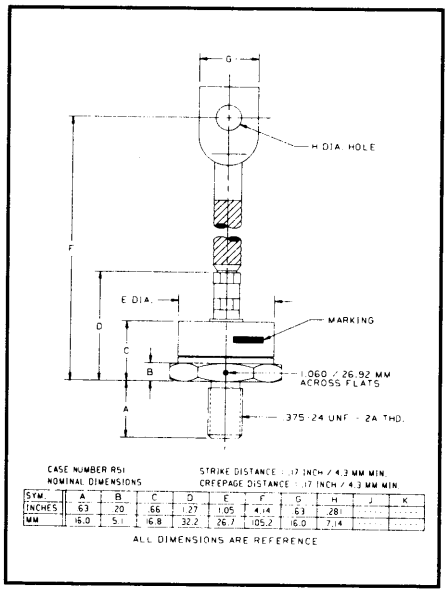
Powerex, Inc., 200 Hillis Street, Youngwood, Pennsylvania 15697-1800 (412) 925-7272
Powerex, Europe, S.A. 428 Avenue G. Durand, BP107, 72003 Le Mans, France (43) 41.14.14

General Purpose Rectifier

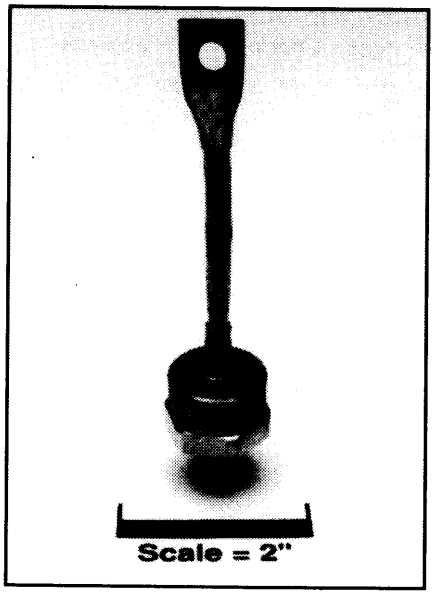
100 Amperes Average
1400 Volts





IN3288A, AR - IN3297A, AR (Outline Drawing)





IN3288A, AR - IN3297A, AR
General Purpose Rectifier
100 Amperes Average, 1400 Volts

Ordering Information:

Select the complete part number you desire from the following table:

Type	Voltage V_{DRM} & V_{RRM} (Volts)	Current $I_{F(av)}$ (A)
IN3288A	100	100
IN3289A	200	
IN3290A	300	
IN3291A	400	
IN3292A	500	
IN3293A	600	
IN3294A	800	
IN3295A	1000	
IN3296A	1200	
IN3297A	1400	

Features:

- ☐ Standard and Reverse Polarities with Color Coded Seals
- ☐ High Surge Current Ratings
- ☐ Electrical Selection for Parallel and Series Operation
- ☐ Compression Bonded Encapsulation

Applications:

- ☐ Welders
- ☐ Battery Chargers
- ☐ Electrochemical Refining
- ☐ Metal Reduction
- ☐ General Industrial High Current Rectification

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IN3288A, AR - IN3297A, AR
General Purpose Rectifier
100 Amperes Average, 1400 Volts

Absolute Maximum Ratings

Characteristics	Symbol	IN3288A,AR - IN3297A,AR	Units
RMS Forward Current	$I_{F(rms)}$	160	Amperes
Average Forward Current	$I_{F(av)}$	100	Amperes
One-half Cycle Surge Current (at 60 Hz, Under Load)	I_{FSM}	2300	Amperes
I^2t (for Fusing) at 60 Hz Half-Wave	I^2t	22000	A^2sec
Storage Temperature	T_{stg}	-40 to +200	°C
Operating Temperature	T_j	-40 to +200	°C
Mounting Torque (Lubricated)		120	in-lb

Electrical and Thermal Characteristics

Characteristics	Symbol	IN3288A	IN3289A*	IN3290A	IN3291A*	IN3292A	IN3293A	IN3294A*	IN3295A*	IN3296A	IN3297A	Units
Current - Conducting State Maximums, T_J = 200°C												
Forward Voltage Drop at 100A Average, T_C = 130°C, Peak Volts	V_{FM}	1.5 (All Types)										Volts
Voltage - Blocking State Maximums												
Repetitive Peak Reverse Voltage	V_{RRM}	100	200	300	400	500	600	800	1000	1200	1400	Volts
Non-rep. Trans. Peak Rev. Voltage	V_{RSM}	200	300	400	525	650	800	1050	1300	1600	1800	Volts
Maximum Allowable DC Blocking Voltage	V_R	100	200	300	400	500	600	800	1000	1200	1400	Volts
Reverse Leakage Current, at Rated V_{RRM}, 100A Average, Single Phase, T_C = 130°C	I_{RRM}	24	24	24	24	21	17	13	11	9	7	mA
Thermal												
Maximum Resistance, Junction to Case	$R_{\theta(j-c)}$	0.40 (All Types)										°C/Watt
Maximum Resistance, Case to Sink (Lubricated)	$R_{\theta(c-s)}$	0.15 (All Types)										°C/Watt

*Available as JAN types

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IN3288A, AR - IN3297A, AR
General Purpose Rectifier
100 Amperes Average, 1400 Volts

Electrical Characteristics

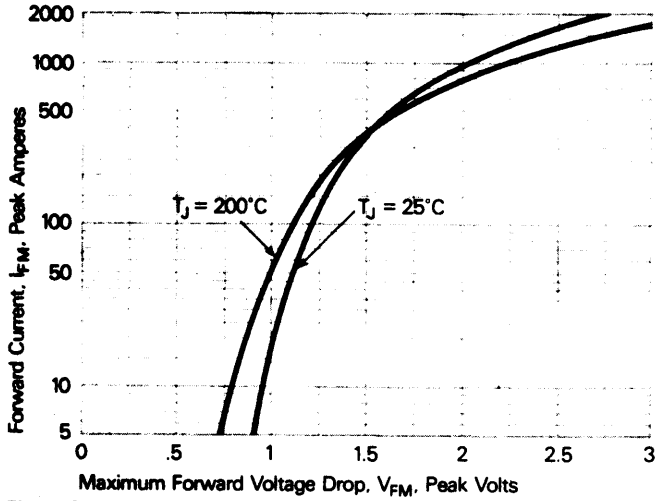


Figure 1. Forward Current vs. Forward Voltage.

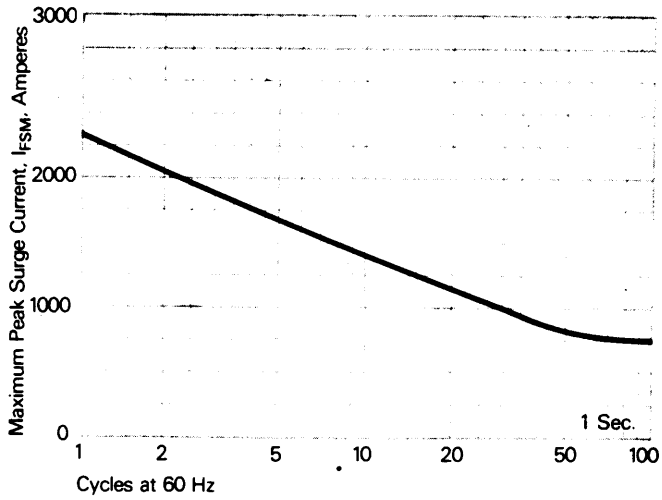


Figure 2. Maximum allowable surge current at rated load conditions.

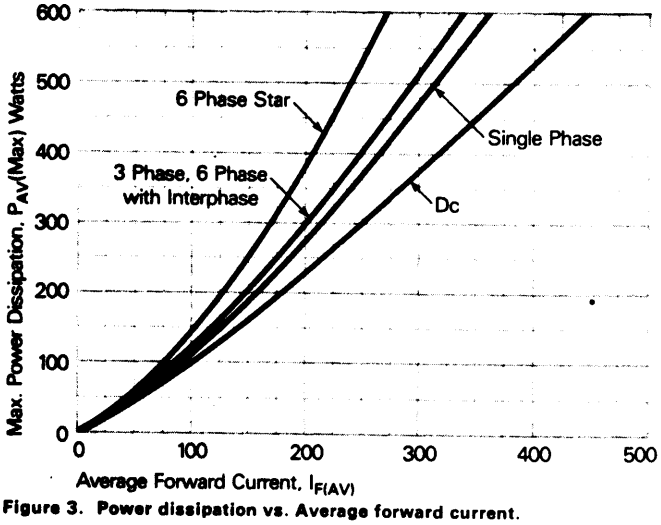


Figure 3. Power dissipation vs. Average forward current.

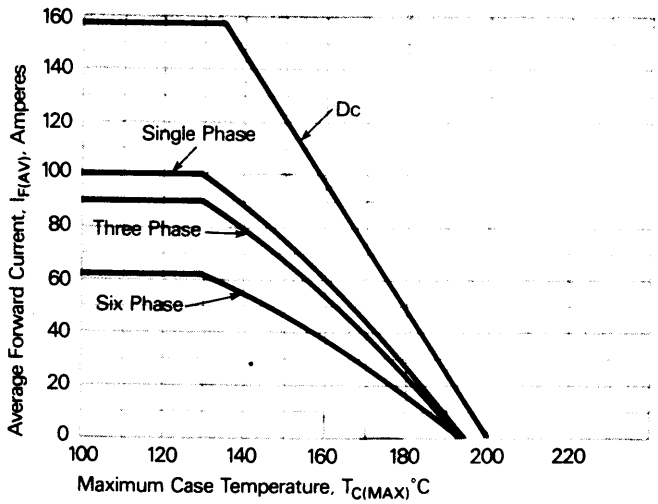


Figure 4. Forward Current vs. Case Temperature.

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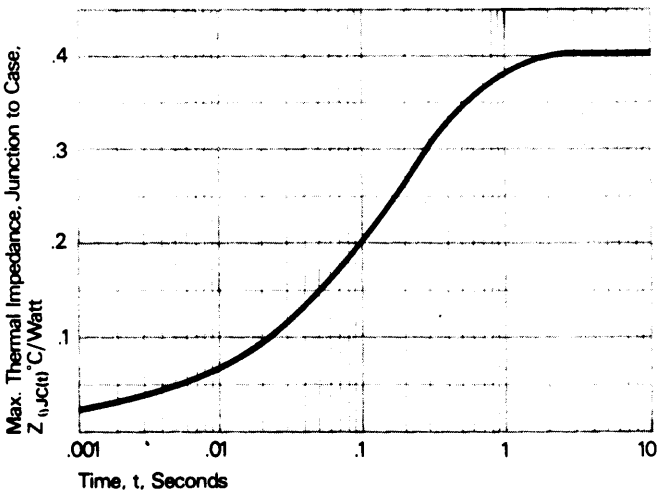


Figure 5. Transient thermal impedance vs. time.