

**RCA****Solid State  
Division****Rectifiers**

<b>1N248C</b>	<b>1N249C</b>	<b>1N1196A</b>
	<b>1N250C</b>	<b>1N1197A</b>
	<b>1N1195A</b>	<b>1N1198A</b>

**Applications:**

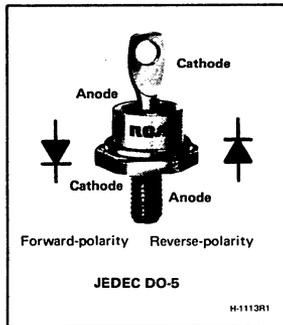
In power supplies for mobile equipment, dc-to-dc converters, battery chargers, dynamic braking systems, aircraft and missile power supplies, high-power transmitter and rf-generator power supplies, machine-tool controls, dc-motor power supplies, and in other heavy-duty industrial and military equipment.

**HALF-WAVE RECTIFIER SERVICE****Maximum Ratings:**

*Absolute-Maximum Values for Supply Frequency of  
60 cps, Single-Phase Operation, and with  
Resistive or Inductive Load*

	1N248-C	1N249-C	1N250-C	1N1195-A	1N1196-A	1N1197-A	1N1198-A
PEAK INVERSE VOLTS . . . .	55	110	220	300	400	500	600
RMS SUPPLY VOLTS . . . .	39	77	154	212	284	355	424
DC BLOCKING VOLTS . . . .	50	100	200	300	400	500	600
FORWARD AMPERES:							
Average DC:							
At 150° C case temperature . .	20	20	20	20	20	20	20
At other temperatures . . . . .	See Rating Chart I						
PEAK RECURRENT AMPERES . . . .	90	90	90	90	90	90	90
PEAK SURGE AMPERES: (One-half cycle, sine wave) . . . . .	350	350	350	350	350	350	350
(For more than one cycle) . . . . .	See Rating Chart IV						
CASE TEMPERATURE:							
Operating and Storage . . . . .	-65 to +175° C						
STUD TORQUE:							
Recommended . . . . .	30 in-lb						
Maximum (DO NOT EXCEED) . . . . .	50 in-lb						

Superimposed on device operating within the maximum specified voltage, current, and temperature ratings and may be repeated after sufficient time has elapsed for the device to return to the presurge thermal equilibrium conditions.

**Stud-Mounted****Types for****Industrial and****Military Power  
Supplies**

- available in reverse-polarity versions: 1N248-RC, 1N249-RC, 1N250-RC, 1N1195-RA, 1N1196-RA, 1N1197-RA, 1N1198-RA
- designed to meet stringent military mechanical and environmental specifications
- diffused-junction process — exceptional uniformity of characteristics
- hermetic seals • welded construction
- low thermal resistance • low leakage current
- low forward voltage drop • JEDEC DO-5 outline
- high output current: up to
  - 84 amperes — 6 rectifiers in 3-phase, full-wave bridge circuit
  - 60 amperes — 4 rectifiers in single-phase full-wave bridge circuit

**Characteristics at 150° C Case Temperature**

Max. Forward Voltage Drop* (Volts) . . . .	0.6	0.6	0.6	0.6	0.6	0.6	0.6
Max. Reverse Current* (Ma.) . . . . .	3.8	3.6	3.4	3.2	2.5	2.2	1.5

- At maximum peak inverse voltage, average forward amperes = 20, and averaged over one complete cycle.

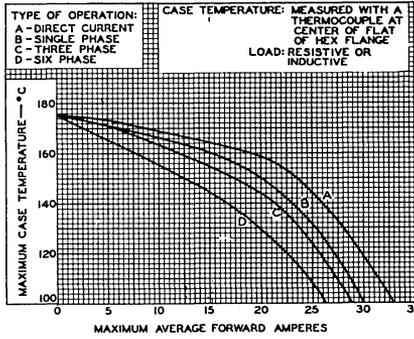


Fig. 1 - Rating Chart 1 for Types 1N248-C, 1N249-C, 1N250-C, 1N1195-A, 1N1196-A, 1N1197-A, 1N1198-A, and corresponding reverse-polarity versions.

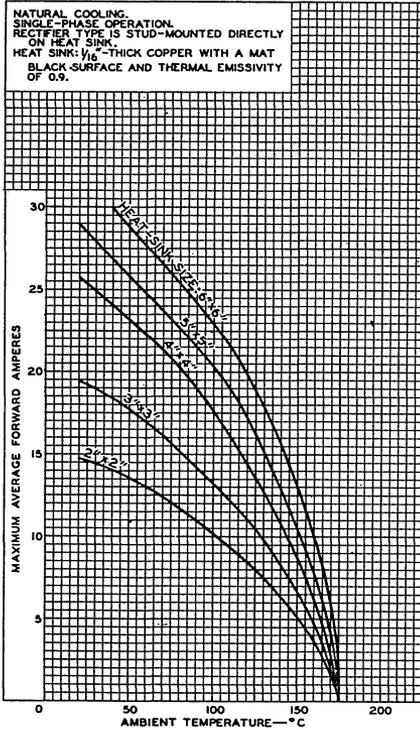


Fig. 2 - Rating Chart II for Types 1N248-C, 1N249-C, 1N250-C, 1N1195-A, 1N1196-A, 1N1197-A, 1N1198-A, and corresponding reverse-polarity versions.

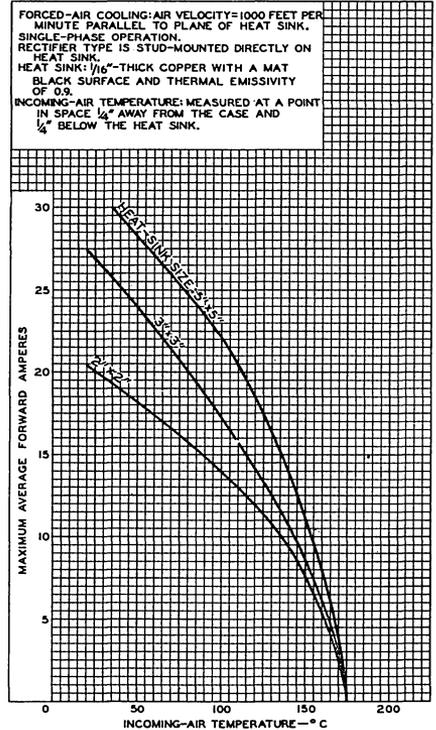


Fig. 3 - Rating Chart III for Types 1N248-C, 1N249-C, 1N250-C, 1N1195-A, 1N1196-A, 1N1197-A, 1N1198-A, and corresponding reverse-polarity versions.

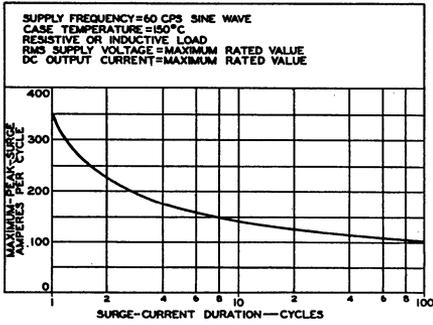


Fig. 4 - Rating Chart IV for Types 1N248-C, 1N249-C, 1N250-C, 1N1195-A, 1N1196-A, 1N1197-A, 1N1198-A, and corresponding reverse-polarity versions.

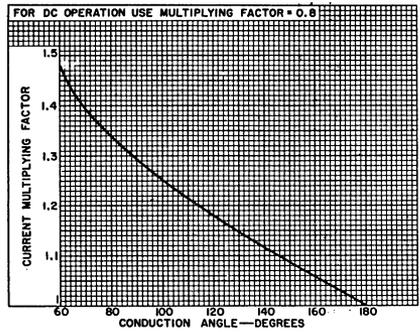


Fig. 5 - Chart V for Types 1N248-C, 1N249-C, 1N250-C, 1N1195-A, 1N1196-A, 1N1197-A, 1N1198-A, and corresponding reverse-polarity versions.

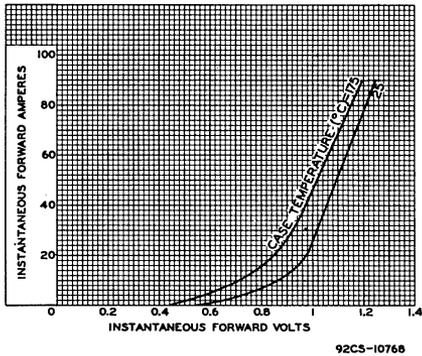


Fig. 6 - Typical Forward Characteristics for Types 1N248-C, 1N249-C, 1N250-C, 1N1195-A, 1N1196-A, 1N1197-A, 1N1198-A, and corresponding reverse-polarity versions.

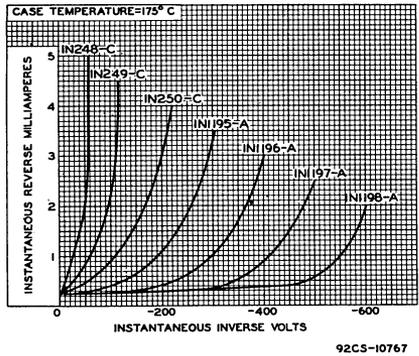


Fig. 7 - Typical Reverse Characteristics for Types 1N248-C, 1N249-C, 1N250-C, 1N1195-A, 1N1196-A, 1N1197-A, 1N1198-A, and corresponding reverse-polarity versions.