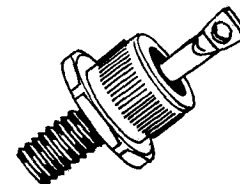


Silicon Rectifiers

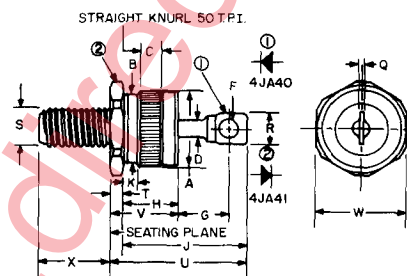
1N3208,R
1N3214,R

A40F—M
A41F—M

General Electric has designed this 20 Ampere rectifier specifically for the normal industrial and consumer low ambient temperature applications. The design utilizes the smallest practical size for the rating with particular attention to rigidity and rugged construction. The solid one-piece terminal and the case-to-hex solder mounting technique provides good mechanical strength, minimizes breakage problems, and promotes stability of heat transfer characteristics from the diffused junction to the stud.



OUTLINE DRAWING



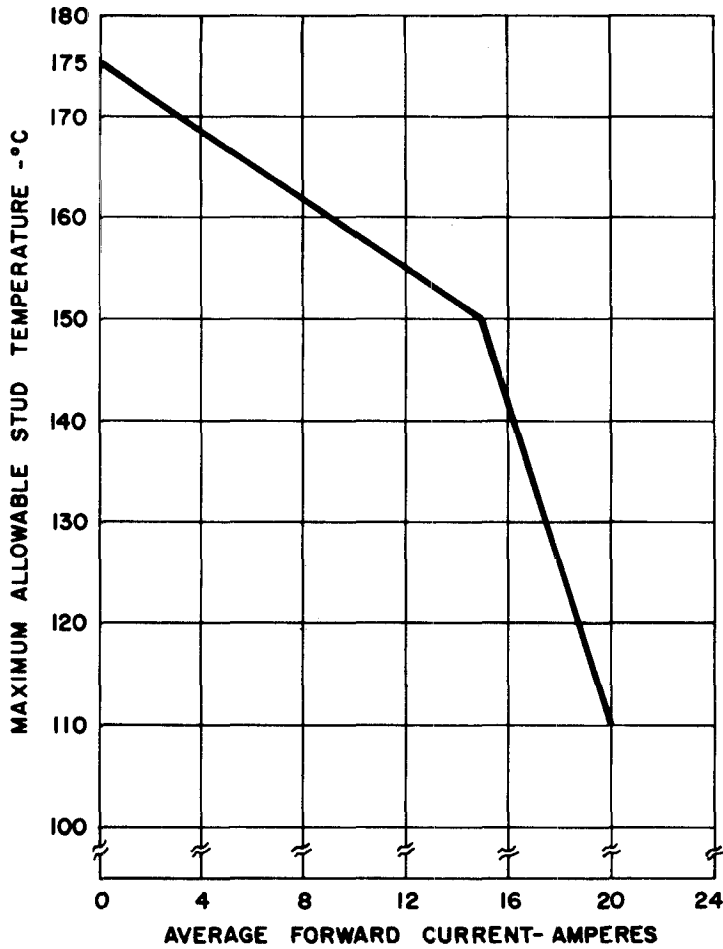
SYMBOL	DECIMAL INCHES		METRIC MM	
	MIN.	MAX.	MIN.	MAX.
A	.501	.505	12.73	12.83
B	.467	.465	11.86	12.07
C	.177	REF.	4.50	REF.
D	.109	REF.	2.77	REF.
F	.104	.115	2.65	2.91
G	.285	.350	7.24	8.88
H	.330	.375	8.39	9.52
J	—	.810	—	20.56
K	.083	.097	2.11	2.46
Q	.034	REF.	.86	REF.
R	—	.250	—	6.34
S	THREAD SIZE—1/4"—280UNF—2A			
T	.086	.098	2.18	2.49
U	—	.920	—	23.36
V	—	.485	—	12.31
W	.552	.562	14.02	14.27
X	.432	.442	10.97	11.23

- High Surge Current Capabilities (Up to 300 Amperes)
- One-piece Terminal
- Positive Solder Case-to-hex Mounting
- Small Size—9/16" Hex, 1/2" Diameter Barrel
- Reverse Polarity Devices Available

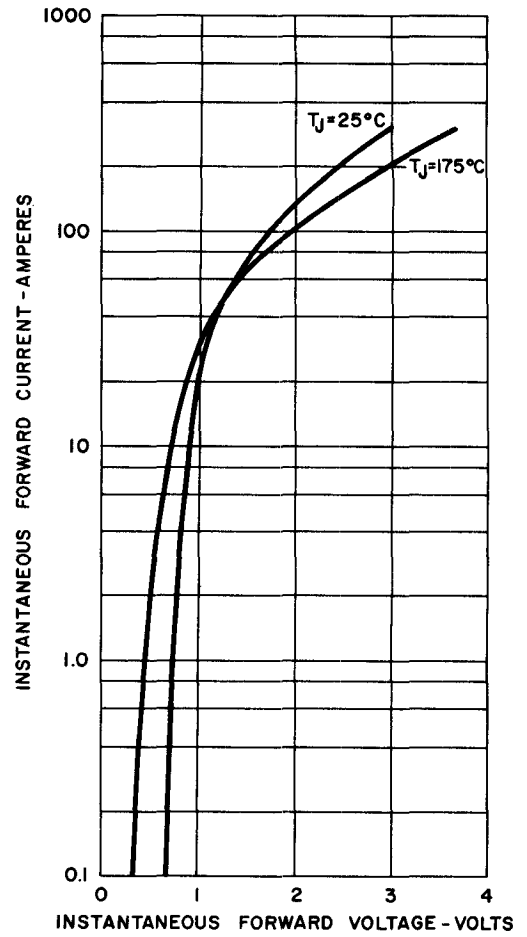
RATINGS AND CHARACTERISTICS (Single Phase Resistive Load)

	Forward Polarity	A40F	A40A	A40B	A40C	A40D	A40E	A40M	
	Reverse Polarity	A41F	A41A	A41B	A41C	A41D	A41E	A41M	
Max. Peak Reverse Voltage		50	100	200	300	400	500	600	volts
Max. Continuous D-C Reverse Voltage		50	100	200	300	400	500	600	volts
Max. Sine Wave RMS Voltage		35	70	140	210	280	350	420	volts
Max. Avg. D-C Forward Current									
At 110°C Stud									
At 150°C Stud									
Peak One-Cycle Forward Surge Current (60 cps, T _j = 25°C)									
I ² t Rating for Fusing or Capacitor Inrush									
Max. Forward Voltage at 20 Amps D-C Forward Current (T _j = 25°C)									
Max. Avg. Forward Voltage Drop (15 amps d-c single phase, T _j = 150°C)									
Max. Reverse Current at Rated D-C Reverse Voltage (T _j = 25°C)									
Max. Full Load Reverse Current (full cycle avg., single phase)		10	9	8	6	5	4.5	4.0	ma
Typical Thermal Resistance (junction to stud)									
Operating Junction Temperature Range									
Storage Temperature Range									
Maximum Stud Torque									

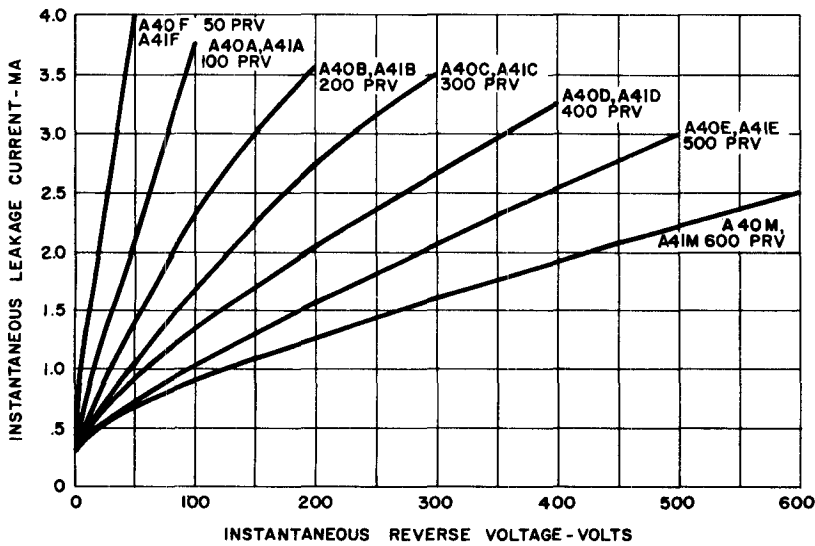
NOTE: 1N3208-1N3214 or 1N3208R-1N3214R are available when desired and are identical to A40F-A40M or A41F-A41M respectively, except that hex size will be 11/16" across the flats on the 1N3208 series.



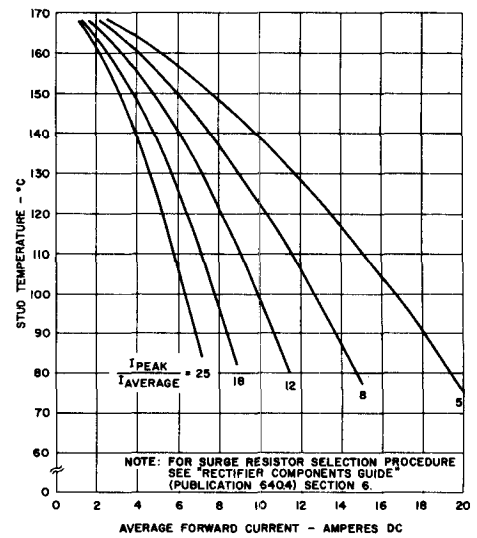
1. SINGLE PHASE AND THREE PHASE CURRENT RATING AS A FUNCTION OF STUD TEMPERATURE



2. TYPICAL FORWARD CHARACTERISTICS



3. TYPICAL REVERSE CHARACTERISTICS ($T_j = 175^\circ\text{C}$)



4. HALF WAVE CAPACITIVE LOAD RATING