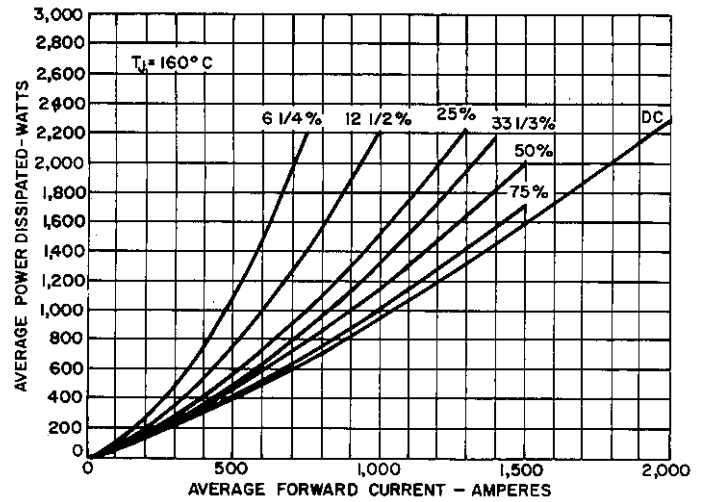
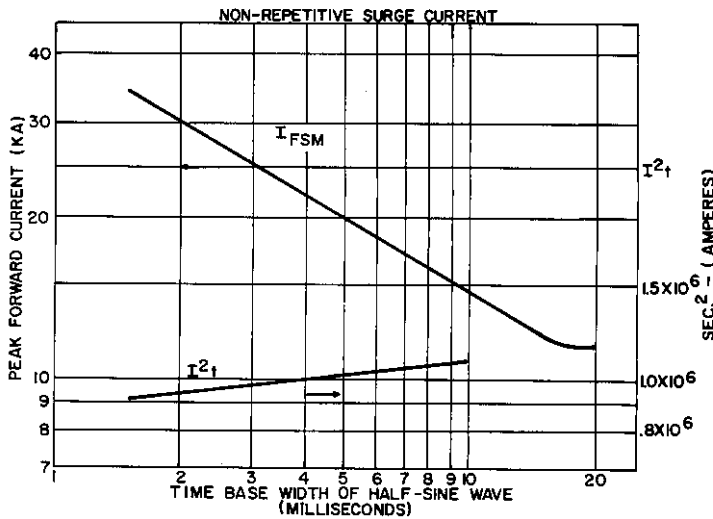


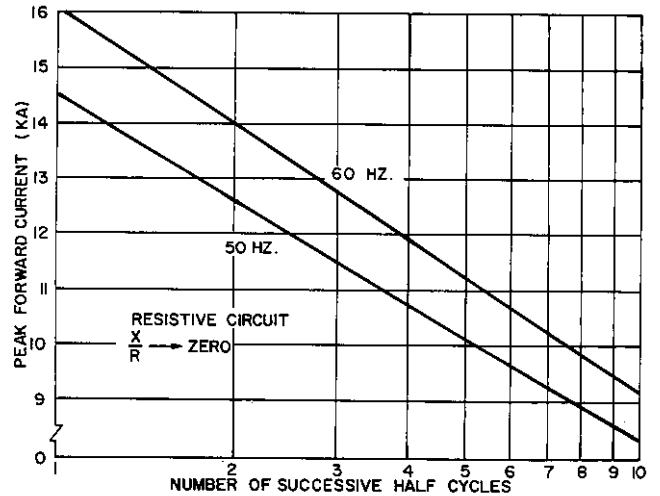
7. POWER DISSIPATION FOR RECTANGULAR CURRENT WAVEFORMS



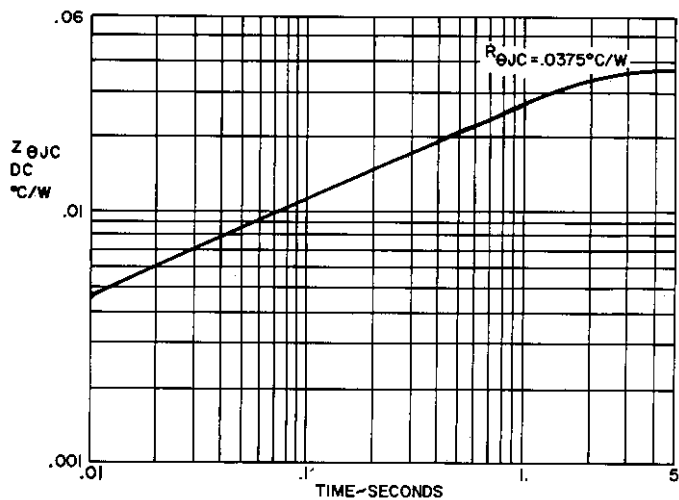
8. EXTENDED POWER DISSIPATION CURVES FOR RECTANGULAR CURRENT WAVEFORMS



9. SUBCYCLE SURGE CURRENT



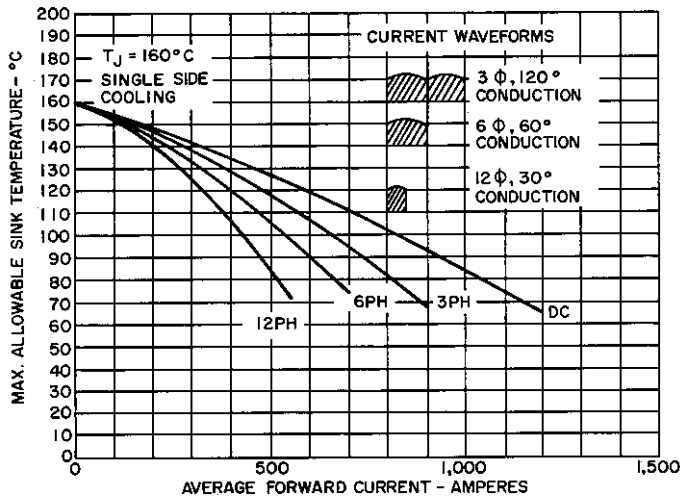
10. MULTICYCLE SURGE CURRENT



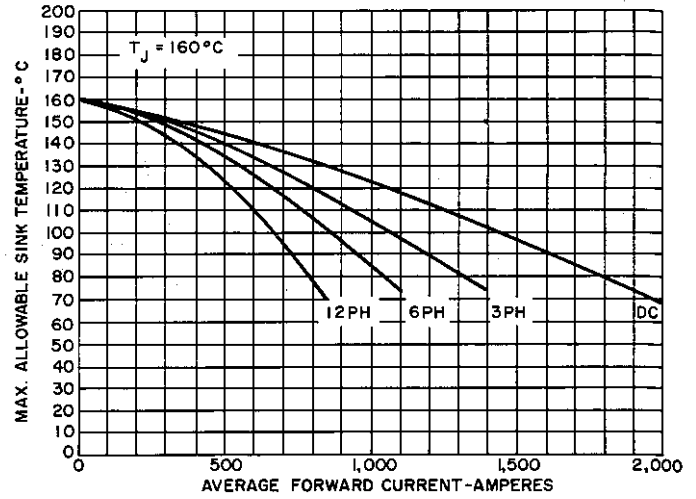
11. TRANSIENT THERMAL IMPEDANCE - JUNCTION-TO-CASE

NOTES:

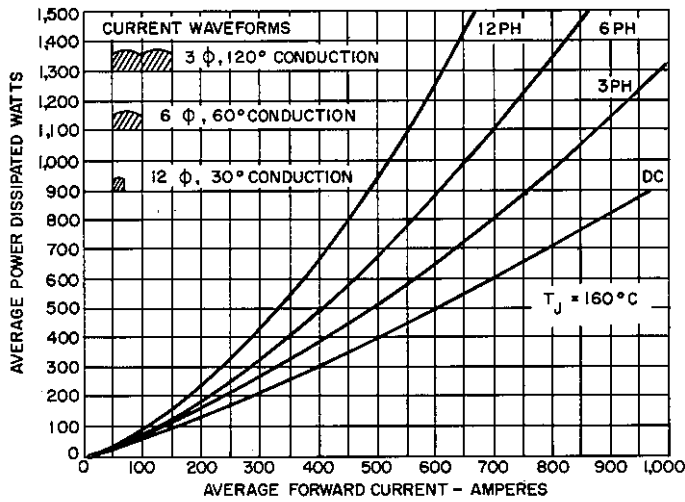
- Add  $.0075^{\circ}\text{C/W}$  to account for both case to dissipator interfaces when properly mounted; e.g.,  $R_{\theta JS} = .045^{\circ}\text{C/W}$ .
- DC Thermal Impedance is based on average full cycle junction temperature. Instantaneous junction temperature may be calculated using the following modifications:
  - end of conducting portion of cycle
    - $120^{\circ}$  sq. wave add  $.0044^{\circ}\text{C/W}$  along entire curve
    - $180^{\circ}$  sq. wave add  $.0032^{\circ}\text{C/W}$  along entire curve
    - $180^{\circ}$  sine wave add  $.0018^{\circ}\text{C/W}$  along entire curve
  - end of full cycle
    - any wave, subtract  $.0018^{\circ}\text{C/W}$  along entire curve



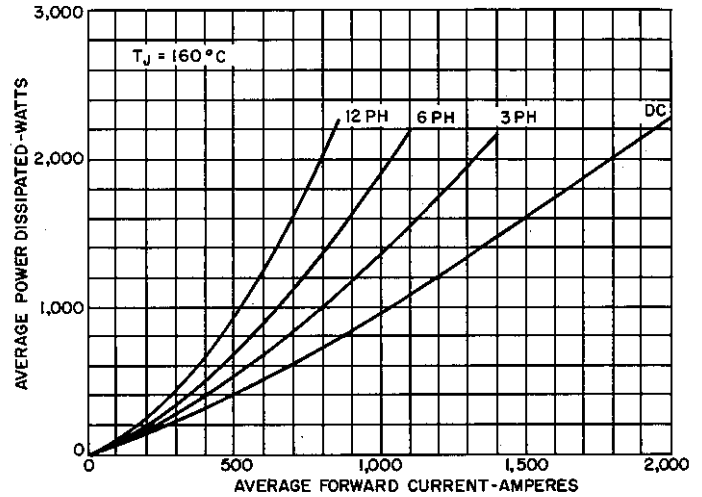
1. MAXIMUM ALLOWABLE HEAT SINK TEMPERATURE FOR SINUSOIDAL COOLING WAVEFORM - SINGLE-SIDE COOLING



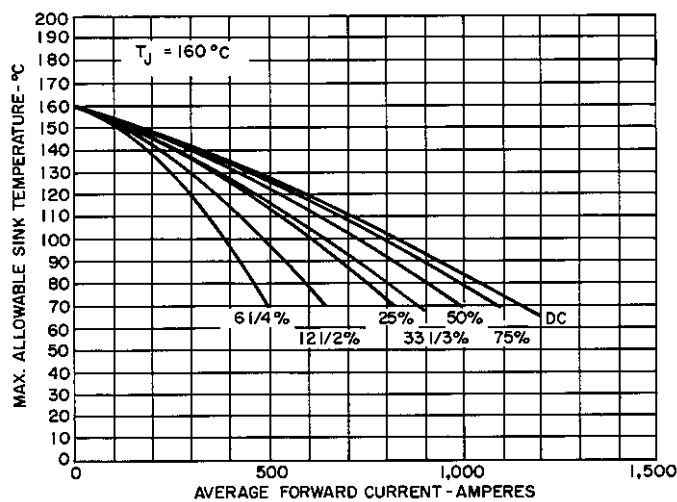
2. MAXIMUM ALLOWABLE HEAT SINK TEMPERATURE FOR SINUSOIDAL CURRENT WAVEFORM - DOUBLE-SIDE COOLING



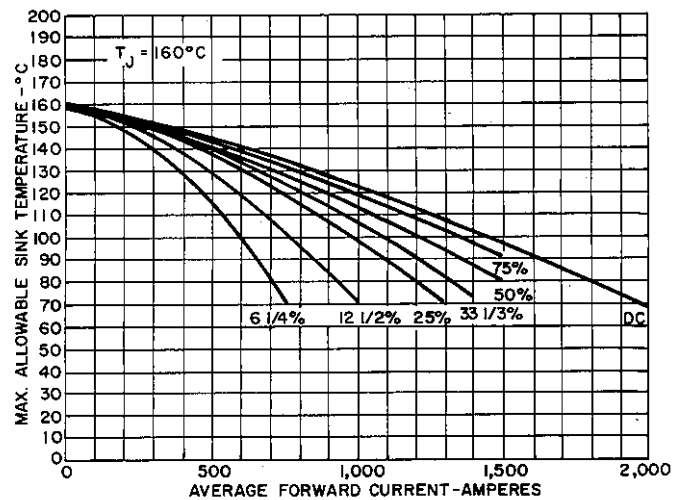
3. AVERAGE POWER DISSIPATION CURVES



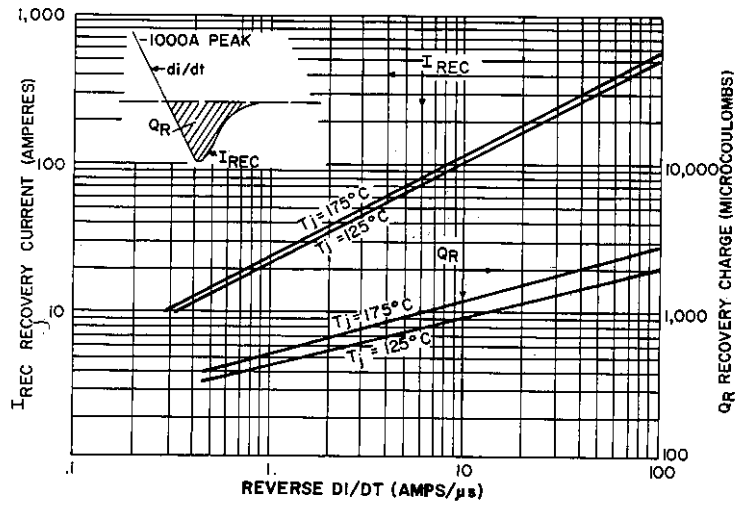
4. EXTENDED SINUSOIDAL POWER DISSIPATION CURVES



5. MAXIMUM ALLOWABLE HEAT SINK TEMPERATURE FOR RECTANGULAR CURRENT WAVEFORMS - SINGLE-SIDE COOLING

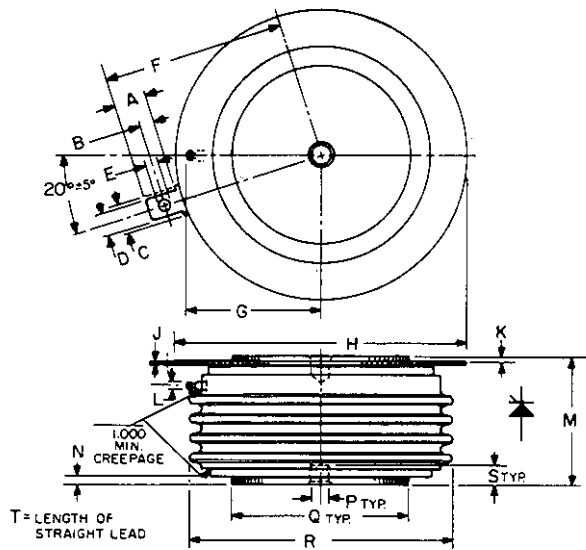


6. MAXIMUM ALLOWABLE HEAT SINK TEMPERATURE FOR RECTANGULAR CURRENT WAVEFORMS - DOUBLE-SIDE COOLING



12. TYPICAL REVERSE RECOVERY CHARACTERISTICS

OUTLINE DRAWING



SYM	DECIMAL INCHES		METRIC M.M.	
	MIN.	MAX.	MIN.	MAX.
A	.240	.260	6.096	6.604
B	.110	.130	2.794	3.302
C	.245		6.223	
D	.186	.191	4.724	4.851
E	.060	.075	1.524	1.905
F		1.430		36.32
G		1.065		27.051
H	2.200	2.500	55.88	63.50
J	.011	.019	2.794	3.483
K	.030		.762	
L	.056	.060	1.422	1.524
M	1.00	1.07	25.40	27.18
N	.030	.096	.762	2.438
P	.13	.15	3.30	3.81
Q	1.30	1.35	33.02	34.29
R		2.150		54.61
S	.07	.08	1.78	2.03