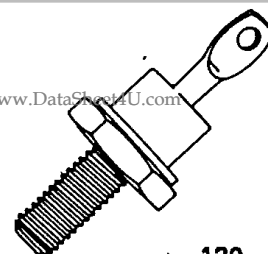


5.2 Condensed Electrical and Thermal Characteristics and Ratings



RECTIFIERS 3 TO 6 AMPERES

119.2

120

JEDEC TYPE	IN5624-27	—	—	IN1612-16	IN1341-48A
GE TYPE	—	A15A-N	A115A-M	—	—

SPECIFICATIONS

$I_{FM(AV)}$	Max. average forward (1 phase operation)		3	3	3	3	6
	$T_C = (^{\circ}C)$		70	70	55	150	150
V_{RM} (REP)	Repetitive peak reverse voltage (V)		200-800	50-800	50-600	50-600	50-600
I_{FM} (Surge)	Max. peak one cycle, non-recurrent surge current (1 phase operation) 50 Hz.		—	—	—	—	—
	@ max. rated load conditions (A) 60 Hz.		125	125	110	150	150
I^2_t	Max. non-repetitive for 1.5 msec (A^2_{sec})		25	25	20	—	—
T_J	Operating junction temperature range ($^{\circ}C$)		– 65 to 175	– 65 to 175	– 65 to 150	– 65 to 190	– 65 to 200
$R_{\theta JC}$	Max. thermal resistance, junction-to-case ($^{\circ}C/W$)		—	—	—	7.0	4.25
V_{FM}	Max. peak forward voltage drop @ rated $I_{F(AV)}$ (1 phase operation)		1.0	1.0	1.0	1.1	1.1
	@ $T_C = (^{\circ}C)$		—	—	—	150	25
$Q_{R(REC)}$	Max. reverse recovered charge (μs), $T_J = 25^{\circ}C$		—	—	—	—	—
t_{π}	Reverse recovery time (μsec), $T_J = 25^{\circ}C$		5	5	0.2	—	—
V_F	Max. forward ⁽¹⁾ voltage drop for the current range:	$I_{MIN}(A)$	—	—	—	—	—
		$I_{MAX}(A)$	—	—	—	—	—
		A	—	—	—	—	—
		B	—	—	—	—	—
		C	—	—	—	—	—
		D	—	—	—	—	—
$R_{\theta JC}$	Transient thermal ⁽²⁾ resistance for time:	$T_{MIN}(S)$	—	—	—	—	—
		$T_{MAX}(S)$	—	—	—	—	—
		F	—	—	—	—	—
		G	—	—	—	—	—
Package Outline No.			119.2	119.2	119.2	120	120
Maximum Stud Torque (In-Lbs/N-M)						15/1.69	15/1.69
Expanded Electrical Characterization, see page:			N.A.	N.A.	N.A.	N.A.	N.A.