

January 16, 1998

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STANDARD RECOVERY, HIGH CURRENT 3-PHASE HALF WAVE BRIDGE RECTIFIER ASSEMBLIES

QUICK REFERENCE DATA

- Low forward voltage drop
- Low reverse leakage current
- Aluminum case
- Low thermal impedance
- High forward and surge current ratings

- $V_R = 50V - 600V$
- $I_F = 135A$
- $I_R = 6.0\mu A$
- $I_{FSM} = 750A$

ABSOLUTE MAXIMUM RATINGS

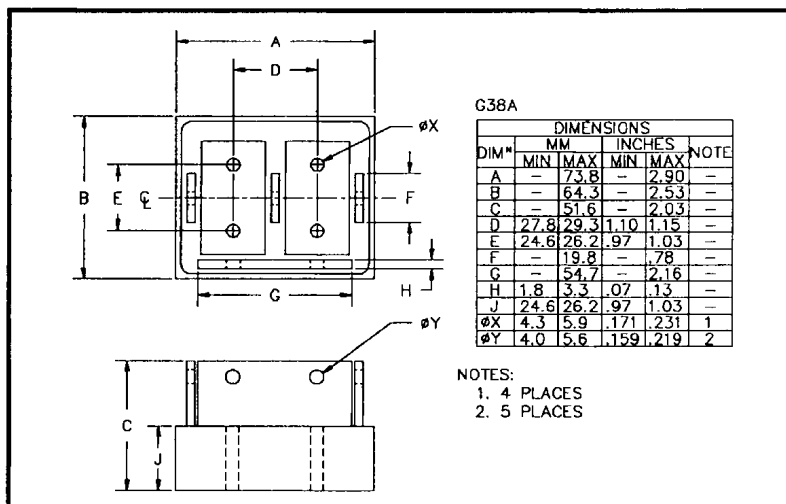
Device Type	Working Reverse Voltage V_{RWM}	Average Rectified Current $I_{F(AV)}$						1 Cycle Surge Current	
		@ case temperature			@ ambient temperature			I_{FSM} @ $t_p = 8.3mS$	
		@ 55°C	@ 100°C	@ 125°C	@ 25°C	@ 55°C	@ 100°C	@ 25°C	@ 100°C
		Volts	Amps	Amps	Amps	Amps	Amps	Amps	Amps
SC3HAS05*	50								
SC3HAS1*	100								
SC3HAS2*	200	135	95	70	19	14.5	9.25	750	600
SC3HAS4*	400								
SC3HAS6*	600								

$R_{\theta JC} = 0.6^\circ C/W$

Add suffix for desired circuit arrangement.

N = Common Anode, P = Common Cathode

MECHANICAL



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ELECTRICAL CHARACTERISTICS

Device Type	Reverse Leakage Current I_R @ V_{RWM}		Maximum Forward Voltage V_F @ 18A/leg @ 25°C	Maximum Reverse Recovery Time t_{rr} @ 25°C	Maximum operating & storage temp range.	
	@ 25°C	@ 100°C			T_{OP}	T_{STG}
	μA	μA	Volts	μS	°C	
SC3HAS05 SC3HAS1 SC3HAS2 SC3HAS4 SC3HAS6	6.0	120	1.0	2.0	- 55 to +150	

¹ Measured on discrete devices prior to assembly

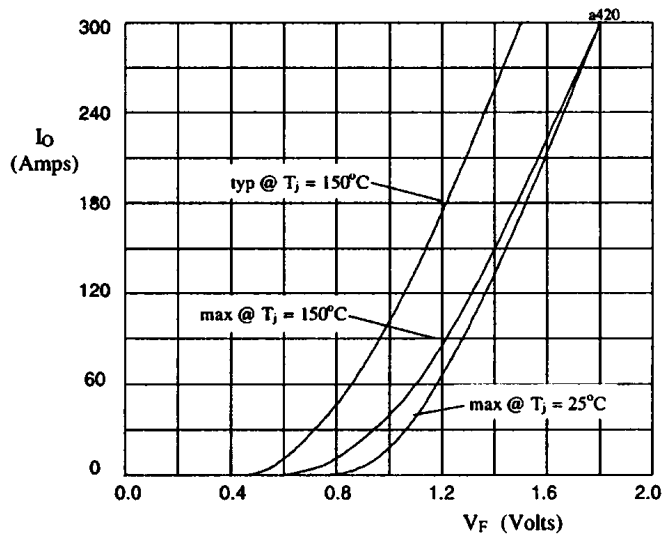


Fig 1. Forward voltage drop against output current per leg

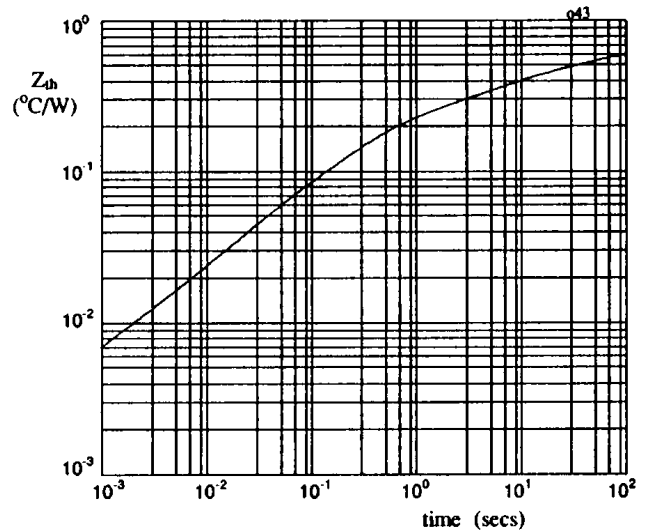


Fig 2. Transient thermal impedance characteristic per leg