

January 16, 1998

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### STANDARD RECOVERY, LOW CURRENT 3-PHASE FULL WAVE BRIDGE RECTIFIER ASSEMBLIES

- Low forward voltage drop
- Low reverse leakage current
- Aluminum case
- Low thermal impedance
- Insulated electrical connections

### QUICK REFERENCE DATA

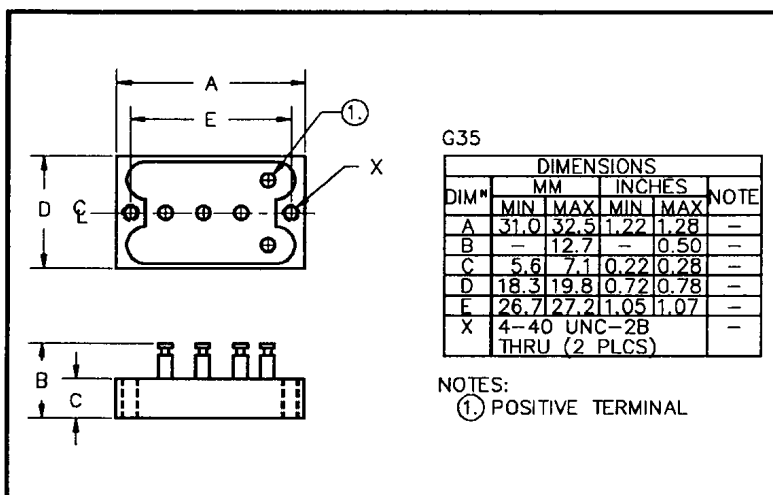
- $V_R = 50V - 600V$
- $I_F = 10A$
- $I_R = 3.0 \mu A$
- $t_{rr} = 2.0\mu S$

### 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
SC3BH05	50								
SC3BH1	100								
SC3BH2	200	10	7	5	4	3	1.7	150	100
SC3BH4	400								
SC3BH6	600								

$$R_{\theta JC} = 4.5^\circ C/W$$

### MECHANICAL



SC3BH6 is available in Europe to DEF STAN 59-61/90/208 release to F and FX levels.

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### ELECTRICAL CHARACTERISTICS

Device Type	Reverse Leakage Current $I_R$ @ $V_{RWM}$		Maximum Forward Voltage $V_F$ @ 3A/leg @ 25°C	Maximum Reverse Recovery Time $t_{rr}$ @ 25°C	Maximum operating & storage temp range.	
	@ 25°C	@ 100°C			$T_{OP}$	$T_{STG}$
	$\mu A$	$\mu A$	Volts	$\mu S$	°C	
SC3BH05	3.0	60	1.0	2.0	- 55 to +150	
SC3BH1						
SC3BH2						
SC3BH4						
SC3BH6						

<sup>1</sup> Measured on discrete devices prior to assembly

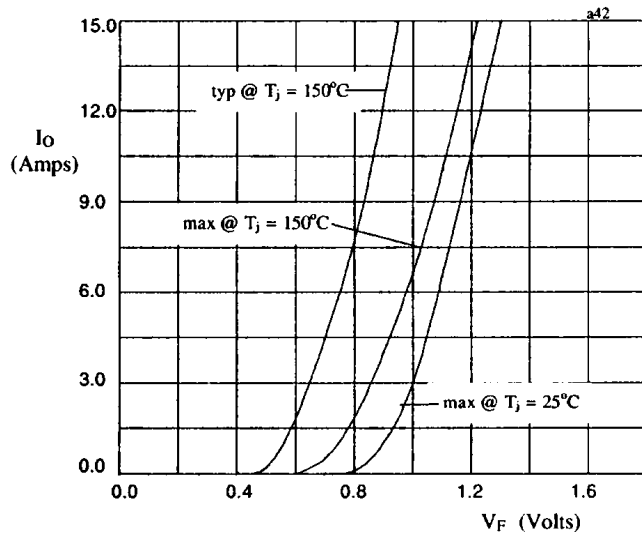


Fig 1. Forward voltage drop against output current per leg

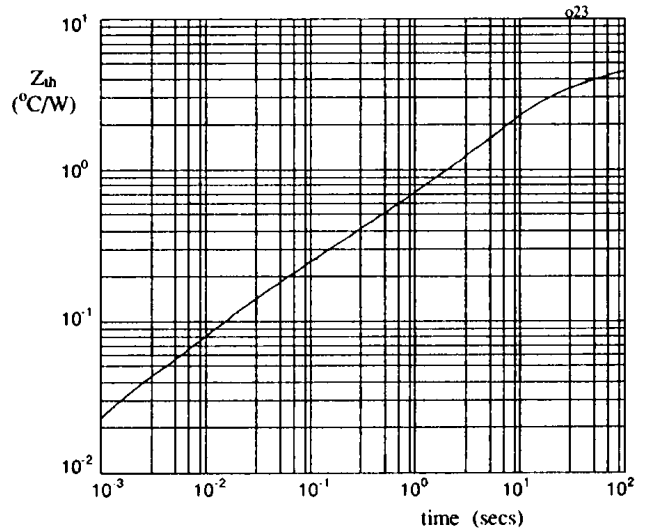


Fig 2. Transient thermal impedance characteristic per leg