# SC6BA2, SC6BA4, SC6BA6, SC6BA8 Standard Recovery 3-Phase Full Wave Bridge Rectifiers

#### **POWER DISCRETES**

#### Description

Standard recovery 30A three phase full wave bridge rectifier.

#### **Features**

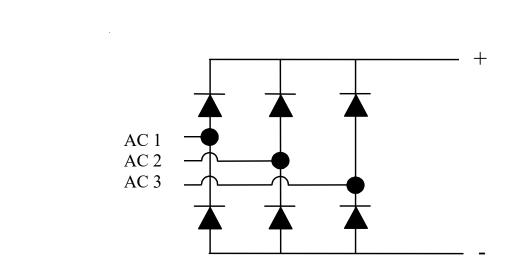
- Low forward voltage drop
- Low reverse leakage
- ◆ Black anodized aluminum case
- ◆ Low thermal resistance < 1.2° C/W
- ◆ Hi-Rel. screened version is similar to Mil-PRF-19500/483
- To order Hi-Rel. version place HR in front of the product name

#### **Applications**

Conversion of 3-phase power to DC power where high power density and rugged design is required. Typical industries are:

- Aerospace
- Military
- High end industrial

## Block Diagram





# SC6BA2, SC6BA4, SC6BA6, SC6BA8

#### one source. one solution.

#### **POWER DISCRETES**

# Absolute Maximum Ratings

Part	Working	Average Rectifier Current I <sub>F(AV)</sub>						1 Cycle Surge Current	
Number	Reverse Voltage	@ 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	Amps
SC6BA2	200								
SC6BA4	400	30	20	10	10	7	5	250	125
SC6BA6	600								
SC6BA8	800								

# **Electrical Specifications**

Part Number	Reverse Leakage Current I <sub>R</sub> @ V <sub>RWM</sub>		Maximum Forward Voltage	Maximum Reverse Recovery Time(1)	Maximum Operational and Storage	
	@25 °C	@100°C	V <sub>F</sub> @ 39A/leg @25 °	T <sub>A</sub> @25 °C	Temperatures T <sub>OP</sub> T <sub>STG</sub>	
	μA	μA	Volts	μs	°C	
SC6BA2						
SC6BA4	1.0	100	1.3	2.0	-65 to +150	
SC6BA6	1					
SC6BA8						

(1) Measured on discrete devices prior to assembly

## Ordering Information

Part Number	Description			
SC6BA2, SC6BA4, SC6BA6, SC6BA8 <sup>(1)</sup>	Standard Recovery 3-Phase full			
HRSC6BA2, HRSC6BA4, HRSC6BA6, HRSC6BA8 <sup>(1)(2)</sup>	wave bridge rectifier assembly			

#### Note:

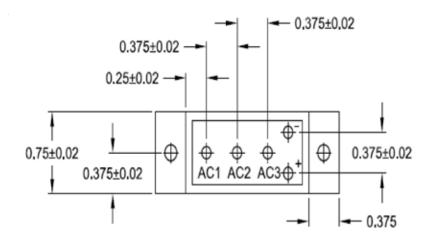
- (1) Available in trays. Please consult factory for quantity.
- (2) Hi-Rel. screened version is similar to Mil-PRF-19500/483.

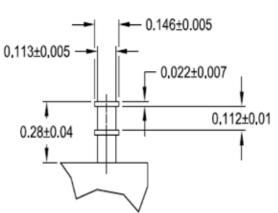


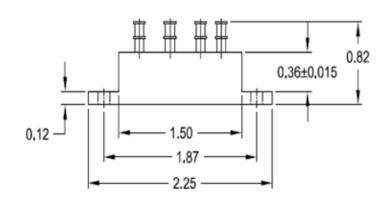
# SC6BA2, SC6BA4, SC6BA6, SC6BA8

### **POWER DISCRETES**

# **Outline Drawing**







NOTE: Unless otherwise stated tolerance is ±0.03. (Dimensions are in inches)