January 16, 1998

TEL:805-498-2111 FAX:805-498-3804 WEB:http://www.semtech.com

# STANDARD RECOVERY, LOW CURRENT 1-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

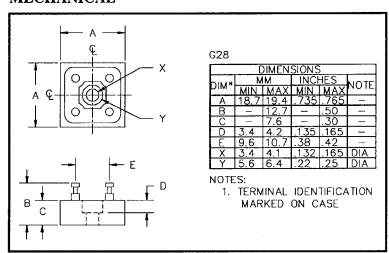
- $V_R = 200V 600V$
- $I_F = 5.0A$
- $I_R = 2.0 \mu A$
- $t_{rr} = 2.0 \mu S$

#### ABSOLUTE MAXIMUM RATINGS

Device Type	Working Reverse Voltage Vrwm	Average Rectified Current I <sub>F(AV)</sub> (@ case temperature) (@ ambient temperature)						1 Cycle Surge Current I <sub>FSM</sub> t <sub>p</sub> = 8.3mS		Surge Current
		@ 55°C	@ 100°C	@ 125°C	@ 25°C	@ 55°C	@ 100°C	@ 25°C @ 100°C	I <sub>FRM</sub> @ 25 °C	
	Volts	Amps	Amps	Amps	Amps	Amps	Amps	Amps	Amps	Amps
SCAJ2 SCAJ4 SCAJ6	200 400 600	5.0	3.5	2.5	2.0	1.5	1.1	50	35	10

 $R_{\theta JC} = 5^{o}C/W$ 

#### **MECHANICAL**



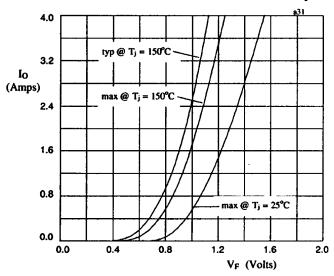
SCAJ6 is available in Europe to DEF STAN 59-61/90/207 release to F and FX levels.

January 16, 1998

### **ELECTRICAL CHARACTERISTICS**

Device Type	Leakage	n Reverse Current V <sub>RWM</sub> @ 100°C	Maximum Forward Voltage V <sub>F</sub> @ 1A/leg	Reverse Recovery Time <sup>1</sup> t <sub>rr</sub> @ 25°C	Maximum operating & storage temp. range.	
	μА	μA	Volts	μS	°C	
SCAJ2 SCAJ4 SCAJ6	2.0	50	1.1	2.0	-55 to +150	

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



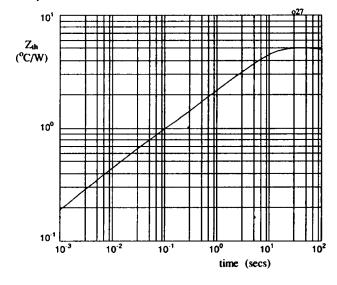


Fig 1. Forward voltage drop against output current per leg.

Fig 2. Transient thermal impedance characteristic per leg

