



# SINGLE PHASE FULL WAVE BRIDGES

ABSOLUTE MAXIMUM RATINGS (@25°C UNLESS OTHERWISE SPECIFIED)

TEL: 805-498-2111 FAX: 805-498-3804

Device Type	Reverse Voltage  V <sub>RRM</sub>  Volts	Average Forward Current						Repetitive Surge Current I <sub>FSM</sub>  Amps	1 Cycle Surge Current I <sub>SM</sub> tp=8.3ms  Amps	Reverse Recovery  T <sub>rr</sub>  ns	Forward Voltage		Reverse Current		Thermal Impedance  θ <sub>JC</sub>  C/W	Case Outline
		(1)			(2)						(3)		I <sub>R</sub>	I <sub>R</sub>		
		I <sub>F</sub> (AV) @ T <sub>C</sub>			I <sub>F</sub> (AV) @ T <sub>A</sub>						V <sub>F</sub>	@ I <sub>F</sub>	I <sub>R</sub>	I <sub>R</sub>		
		55 C	100 C	125 C	25 C	55 C	100 C				@25 C		@25 C	@100 C		

SET061203 <sup>A</sup>	1000	30	22	16	—	—	—	—	150	2000	1.2	9	2	40	0.75	G52
SET061204 <sup>A</sup>	400	30	22	16	—	—	—	—	150	150	1.5	9	2	40	0.75	G52
SET061211	150	30	20	14	—	—	—	—	175	30	1.1	9	20	1000	0.75	G52
SET061212 <sup>A</sup>	600	30	22	16	—	—	—	—	150	2000	1.2	9	2	40	0.75	G52
SET061219 <sup>A</sup>	1000	20	16	12	—	—	—	—	150	150	2.2	9	2	50	0.75	G52
SET061223	500	20	16	12	—	—	—	—	150	50	1.6	9	20	1000	0.75	G52
SET121203 <sup>A</sup>	1000	30	22	16	—	—	—	—	150	2000	1.2	9	2	40	0.75	G72
SET121204 <sup>A</sup>	400	30	22	16	—	—	—	—	150	150	1.5	9	2	40	0.75	G72
SET121211	150	30	20	14	—	—	—	—	175	30	1.1	9	20	1000	0.75	G72
SET121212 <sup>A</sup>	600	30	22	16	—	—	—	—	150	2000	1.2	9	2	40	0.75	G72
SET121219 <sup>A</sup>	1000	20	16	12	—	—	—	—	150	150	2.2	9	2	50	0.75	G72
SET121223	500	20	16	12	—	—	—	—	150	50	1.6	9	20	1000	0.75	G72
SCAJ2	200	5.0	3.5	2.5	2.0	1.5	1.1	10	50	2000	1.10	1.0	2	50	5.00	G28
SCAJ4	400	5.0	3.5	2.5	2.0	1.5	1.1	10	50	2000	1.10	1.0	2	50	5.00	G28
SCAJ6 <sup>I</sup>	600	5.0	3.5	2.5	2.0	1.5	1.1	10	50	2000	1.10	1.0	2	50	5.00	G28
SCAJ05F	50	4.5	3.0	2.0	1.5	1.0	0.7	—	25	150	1.20	1.0	2	50	5.00	G28
SCAJ1F	100	4.5	3.0	2.0	1.5	1.0	0.7	—	25	150	1.20	1.0	2	50	5.00	G28
SCAJ2F	200	4.5	3.0	2.0	1.5	1.0	0.7	—	25	150	1.20	1.0	2	50	5.00	G28
SCAJ4F <sup>F</sup>	400	4.5	3.0	2.0	1.5	1.0	0.7	—	25	150	1.20	1.0	2	50	5.00	G28
SCAJ6F	600	4.5	3.0	2.0	1.5	1.0	0.7	—	25	250	1.20	1.0	2	50	5.00	G28
SCAJ05FF	50	5.0	3.8	2.9	1.5	1.1	0.7	13	35	30	1.20	1.5	2	100	5.00	G28
SCAJ10FF	100	5.0	3.8	2.9	1.5	1.1	0.7	13	35	30	1.20	1.5	2	100	5.00	G28
SCAJ15FF	150	5.0	3.8	2.9	1.5	1.1	0.7	13	35	30	1.20	1.5	2	100	5.00	G28
SCBH2	200	12	9.0	8.5	4.0	3.0	1.7	50	150	2000	1.00	3.0	2	50	3.30	G28
SCBH4	400	12	9.0	8.5	4.0	3.0	1.7	50	150	2000	1.00	3.0	2	50	3.30	G28
SCBH6 <sup>F</sup>	600	12	9.0	8.5	4.0	3.0	1.7	50	150	2000	1.00	3.0	2	50	3.30	G28
SCBH05F	50	10	7.5	5.5	4.0	3.0	1.7	25	150	150	1.10	3.0	2	50	3.30	G28
SCBH1F	100	10	7.5	5.5	4.0	3.0	1.7	25	150	150	1.10	3.0	2	50	3.30	G28
SCBH2F	200	10	7.5	5.5	4.0	3.0	1.7	25	150	150	1.10	3.0	2	50	3.30	G28
SCBH4F <sup>F</sup>	400	10	7.5	5.5	4.0	3.0	1.7	50	150	150	1.10	3.0	2	50	3.30	G28
SCBH05FF	50	12	9.0	7.5	5.0	3.8	2.0	24	175	30	0.97	5.0	20	1000	3.30	G28
SCBH10FF	100	12	9.0	7.5	5.0	3.8	2.0	24	175	30	0.97	5.0	20	1000	3.30	G28
SCBH15FF	150	12	9.0	7.5	5.0	3.8	2.0	24	175	30	0.97	5.0	20	1000	3.30	G28
SCBA2	200	25	18.5	12.5	6.0	5.0	3.0	—	150	2000	1.00	3.0	2	40	2.00	G29
SCBA4	400	25	18.5	12.5	6.0	5.0	3.0	—	150	2000	1.00	3.0	2	40	2.00	G29
SCBA6 <sup>F</sup>	600	25	18.5	12.5	6.0	5.0	3.0	—	150	2000	1.00	3.0	2	40	2.00	G29
SCBA05F	50	20	15.0	10.0	5.0	4.0	2.5	—	150	150	1.10	3.0	2	50	2.00	G29
SCBA1F	100	20	15.0	10.0	5.0	4.0	2.5	—	150	150	1.10	3.0	2	50	2.00	G29
SCBA2F	200	20	15.0	10.0	5.0	4.0	2.5	—	150	150	1.10	3.0	2	50	2.00	G29
SCBA4F <sup>F</sup>	400	20	15.0	10.0	5.0	4.0	2.5	—	150	150	1.10	3.0	2	50	2.00	G29
SCBA05FF	50	25	18.5	12.8	5.0	3.0	1.8	—	175	30	0.97	5.0	20	1000	2.00	G29
SCBA10FF	100	25	18.5	12.8	5.0	3.0	1.8	—	175	30	0.97	5.0	20	1000	2.00	G29
SCBA15FF	150	25	18.5	12.8	5.0	3.0	1.8	—	175	30	0.97	5.0	20	1000	2.00	G29

**NOTES:**

Operating and Storage Temperature Range -55 C to +150 C unless otherwise indicated

(A) Operating and Storage Temperature Range -55 C to +175 C

(F) Available in Europe to F and FX levels

(1) Ratings at Case Temperature T<sub>C</sub>

(2) Ratings at Ambient Temperature T<sub>A</sub>

(3) Measured on discrete devices prior to assembly

Device Type	Reverse Voltage  V <sub>RRM</sub>  Volts	Average Forward Current						Repetitive Surge Current  I <sub>FRM</sub>  Amps	1 Cycle Surge Current tp=8.3ms  I <sub>FSM</sub>  Amps	Reverse Recovery  T <sub>rr</sub>  ns	Forward Voltage		Reverse Current		Thermal Impedance  θ <sub>JC</sub>  C/W	Case Outline
		(1)			(2)						V <sub>f</sub>	@I <sub>f</sub>	I <sub>r1</sub>	I <sub>r2</sub>		
		I <sub>f</sub> (AV) @ T <sub>c</sub>			I <sub>f</sub> (AV) @ T <sub>a</sub>											
		55 C	100 C	125 C	25 C	55 C	100 C				@25 C	@25 C	@100 C			

SCBK05	50	38	24.0	17.5	13.0	10.0	6.0	80	500	2000	1.00	12	8	200	1.20	G30A
SCBK1	100	38	24.0	17.5	13.0	10.0	6.0	80	500	2000	1.00	12	8	200	1.20	G30A
SCBK2	200	38	24.0	17.5	13.0	10.0	6.0	80	500	2000	1.00	12	8	200	1.20	G30A
SCBK4	400	38	24.0	17.5	13.0	10.0	6.0	80	500	2000	1.00	12	8	200	1.20	G30A
SCBK6	600	38	24.0	17.5	13.0	10.0	6.0	80	500	2000	1.00	12	8	200	1.20	G30A
SCBK05F	50	32	20.0	16.0	11.0	8.5	5.0	80	500	150	1.10	12	8	200	1.20	G30A
SCBK1F	100	32	20.0	16.0	11.0	8.5	5.0	80	500	150	1.10	12	8	200	1.20	G30A
SCBK2F	200	32	20.0	16.0	11.0	8.5	5.0	80	500	150	1.10	12	8	200	1.20	G30A
SCBK4F	400	32	20.0	16.0	11.0	8.5	5.0	80	500	150	1.10	12	8	200	1.20	G30A
SCBK05FF	50	38	28.0	20.0	13.0	9.2	5.5	80	600	30	0.97	20	80	4000	1.20	G30A
SCBK10FF	100	38	28.0	20.0	13.0	9.2	5.5	80	600	30	0.97	20	80	4000	1.20	G30A
SCBK15FF	150	38	28.0	20.0	13.0	9.2	5.5	80	600	30	0.97	20	80	4000	1.20	G30A
SCBAR05	50	53	35	25	9.5	7.0	4.50	—	375	2000	1.00	9.0	6	240	0.7	G31
SCBAR1	100	53	35	25	9.5	7.0	4.50	—	375	2000	1.00	9.0	6	240	0.7	G31
SCBAR2	200	53	35	25	9.5	7.0	4.50	—	375	2000	1.00	9.0	6	240	0.7	G31
SCBAR4	400	53	35	25	9.5	7.0	4.50	—	375	2000	1.00	9.0	6	240	0.7	G31
SCBAR6	600	53	35	25	9.5	7.0	4.50	—	375	2000	1.00	9.0	6	240	0.7	G31
SCBAR8	800	53	35	25	9.5	7.0	4.50	—	375	2000	1.00	9.0	6	240	0.7	G31
SCBAR10	1000	53	35	25	9.5	7.0	4.50	—	375	2000	1.00	9.0	6	240	0.7	G31
SCBAR05F	50	50	31	20	9.0	6.7	4.3	—	375	150	1.1	9.0	6	150	0.7	G31
SCBAR1F	100	50	31	20	9.0	6.7	4.3	—	375	150	1.1	9.0	6	150	0.7	G31
SCBAR2F	200	50	31	20	9.0	6.7	4.3	—	375	150	1.1	9.0	6	150	0.7	G31
SCBAR4F	400	50	31	20	9.0	6.7	4.3	—	375	150	1.1	9.0	6	150	0.7	G31
SCBAR05FF	50	55	37	22	9.0	6.7	4.3	64	450	30	0.97	15	60	3000	0.70	G31
SCBAR10FF	100	55	37	22	9.0	6.7	4.3	64	450	30	0.97	15	60	3000	0.70	G31
SCBAR15FF	150	55	37	22	9.0	6.7	4.3	64	450	30	0.97	15	60	3000	0.70	G31
SCAS05	50	70	47	33	18.0	14.0	9.0	120	750	2000	1.00	18	12	300	0.40	G27
SCAS1	100	70	47	33	18.0	14.0	9.0	120	750	2000	1.00	18	12	300	0.40	G27
SCAS2	200	70	47	33	18.0	14.0	9.0	120	750	2000	1.00	18	12	300	0.40	G27
SCAS4	400	70	47	33	18.0	14.0	9.0	120	750	2000	1.00	18	12	300	0.40	G27
SCAS6	600	70	47	33	18.0	14.0	9.0	120	750	2000	1.00	18	12	300	0.40	G27
SCAS05F	50	65	43	30	16.0	11.5	7.2	120	750	150	1.10	18	12	300	0.40	G27
SCAS1F	100	65	43	30	16.0	11.5	7.2	120	750	150	1.10	18	12	300	0.40	G27
SCAS2F	200	65	43	30	16.0	11.5	7.2	120	750	150	1.10	18	12	300	0.40	G27
SCAS4F	400	65	43	30	16.0	11.5	7.2	120	750	150	1.10	18	12	300	0.40	G27
SCAS05FF	50	70	48	35	18.0	12.5	8.0	125	900	30	0.97	30	120	6000	0.40	G27
SCAS10FF	100	70	48	35	18.0	12.5	8.0	125	900	30	0.97	30	120	6000	0.40	G27
SCAS15FF	150	70	48	35	18.0	12.5	8.0	125	900	30	0.97	30	120	6000	0.40	G27

**NOTES:**

Operating and Storage Temperature Range -55 C to +150 C unless otherwise indicated

(A) Operating and Storage Temperature Range -55 C to +175 C

(F) Available in Europe to F and FX levels

(1) Ratings at Case Temperature T<sub>c</sub>

(2) Ratings at Ambient Temperature T<sub>a</sub>

(3) Measured on discrete devices prior to assembly

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