

SEMTECH

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"SLIMPAC" HIGH VOLTAGE-HIGH CURRENT SILICON RECTIFIERS

The Semtech's "Siimpac" is a new high density high voltage high current silicon rectifier for use in industrial and military applications which require small, light-weight rectifiers without compromise on the required high reliability criteria. Designed and tooled to be efficiently mass produced, "Siimpac" can be used economically in existing applications. The rectifier can be utilized in all standard, single and polyphase rectifier circuits. Designed to be corona free, the unit is capable of meeting stringent electrical, mechanical, and environmental specifications.

Type No.	Peak Inverse Voltage Volts	Average Rectified Current		One Cycle Surge Current		Reverse Current @ PIV		Max. Forward Voltage 500 MA 25°C	Max. Case Size (A) Inches	Data Sheet No.
		55°C	100°C	25°C	100°C	25°C	100°C			
		Amps	Amps	Amps	Amps	µA	µA			
SCH5000	5000	.5	.33	50	25	0.1	15	7	1.125	H46
SCH7500	7500	.5	.33	50	25	0.1	15	10	1.625	H46
SCH10000	10000	.5	.33	50	25	0.1	15	14	2.000	H46
SCH12500	12500	.5	.33	50	25	0.1	15	17	2.375	H46
SCH15000	15000	.5	.33	50	25	0.1	15	20	2.750	H46
SCH20000	20000	.5	.33	50	25	0.1	15	27	3.500	H46
SCH25000	25000	.5	.33	50	25	0.1	15	33	4.250	H46

MEDIUM RECOVERY ** (t.) 1 MICROSECOND

Type No.	Peak Inverse Voltage	Average Rectified Current	One Cycle Surge Current	Reverse Current @ PIV	Max. Forward Voltage	Case Size	Data Sheet No.			
SCHF5000	5000	.5	.33	50	25	0.1	15	7	1.125	H47
SCHF7500	7500	.5	.33	50	25	0.1	15	10	1.625	H47
SCHF10000	10000	.5	.33	50	25	0.1	15	14	2.000	H47
SCHF12500	12500	.5	.33	50	25	0.1	15	17	2.375	H47
SCHF15000	15000	.5	.33	50	25	0.1	15	20	2.750	H47
SCHF20000	20000	.5	.33	50	25	0.1	15	27	3.500	H47
SCHF25000	25000	.5	.33	50	25	0.1	15	33	4.250	H47

FAST RECOVERY ** (t.) 150 NANoseconds

Type No.	Peak Inverse Voltage	Average Rectified Current	One Cycle Surge Current	Reverse Current @ PIV	Max. Forward Voltage	Case Size	Data Sheet No.			
SCF2500	2500	.5	.33	25	12.5	0.1	15	6	1.125	H47
SCF5000	5000	.5	.33	25	12.5	0.1	15	12	2.000	H47
SCF7500	7500	.5	.33	25	12.5	0.1	15	18	2.750	H47
SCF10000	10000	.5	.33	25	12.5	0.1	15	24	3.500	H47
SCF12500	12500	.5	.33	25	12.5	0.1	15	30	4.250	H47

**TRR Reverse Recovery ts measured on each Junction prior to manufacture of assembly.
0.5 Amp forward current to 1.0 Amp reverse current. Recovery time measured when rectifier recovers to .2:5 Amp.
Operating and storage temperature -55°C to +150°C

"SLIMPAC SR."

ALSO AVAILABLE IN FAST RECOVERY

Type No.	Peak Inverse Voltage Volts	Average Rectified Current		One Cycle Surge Current		Reverse Current @ PIV		Max. Forward Voltage @ 1 Amp	Case Size A	Data Sheet No.
		55°C	100°C	25°C	100°C	25°C	100°C			
		Amps	Amps	Amps	Amps	µA	µA			
SCHS2500	2500	2	1.2	150		10	120	5	1.5	H48
SCHS5000	5000	2	1.2	150		10	120	10	2.5	H48
SCHS7500	7500	2	1.2	150		10	120	15	3.5	H48
SCHS10000	10000	2	1.2	150		10	120	20	4.5	H48
SCHS12500	12500	2	1.2	150		10	120	25	5.5	H48
SCHS15000	15000	2	1.2	150		10	120	30	6.5	H48

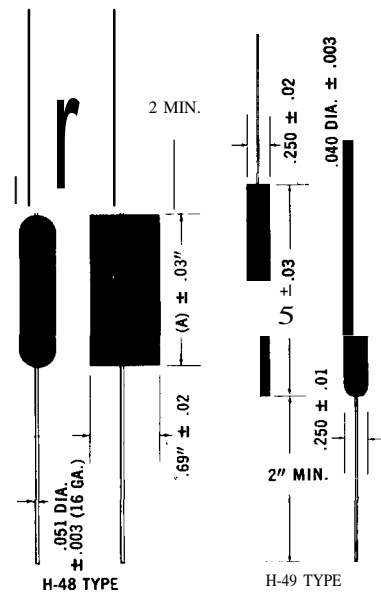
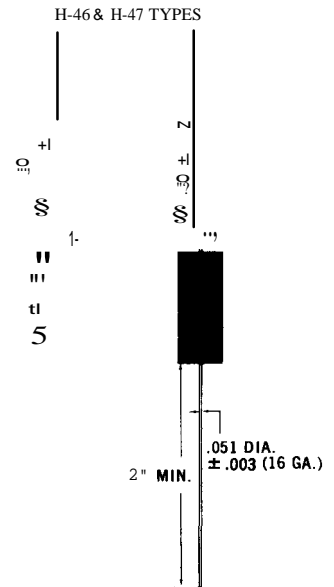
Operating and storage temperature -55°C to +150°C

"SLIMPAC JR."

@50MA

Type No.	Peak Inverse Voltage	Average Rectified Current	One Cycle Surge Current	Reverse Current @ PIV	Max. Forward Voltage	Case Size	Data Sheet No.			
SCHJ15K	15000	.050	.030	4	2	0.1	25	20	1.5	H49
SCHJ22.5K	22500	.050	.030	4	2	0.1	25	30	2	H49
SCHJ30K	30000	.050	.030	4	2	0.1	25	40	2.5	H49
SCHJ37.5K	37500	.050	.030	4	2	0.1	25	50	3	H49
SCHJ45K	45000	.050	.030	4	2	0.1	25	60	3.5	H49

Operating and storage temperature -55°C to +150°C



Semtech reserves the right to change specifications without notice.