



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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## HIGH VOLTAGE, HIGH CURRENT, STANDARD RECOVERY DOUBLER AND CENTER TAPS

- Up to 12kV reverse voltage
- Air or oil environment
- Low reverse leakage currents
- High forward current and surge ratings
- Integral cooling fins

## QUICK REFERENCE DATA

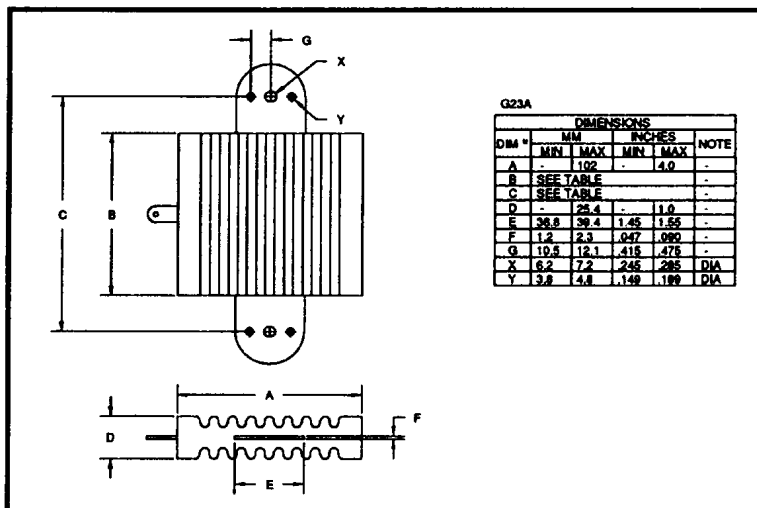
- $V_R = 2kV - 12kV$
- $I_F = 30 - 40A$  (in oil)
- $I_R = 4.0\mu A$
- $I_{FSM} = 500A$

### ABSOLUTE MAXIMUM RATINGS (apply per leg)

Device Type	Working Reverse Voltage $V_{RWM}$	Average Rectified Current				1 Cycle Surge Current $t_p = 8.3mS$		Repetitive Surge Current	$I^2t$ $t_p = 8.3mS$
		air @ 25°C	air @ 65°C	forced air 600CFM @ 55°C	in oil @ 25°C	@ 25°C	@ 100°C	@ 25°C	@ 25°C
		Volts	Amps	Amps	Amps	Amps	Amps	Amps	A <sup>2</sup> S
S4KW2C-1*	2000	16	11	16	40	↑	↑	↑	↑
S4KW4C-2*	4000	12	8	12	30	↑	↑	↑	↑
S4KW6C-3*	6000	12	8	12	30	500	400	80	975
S4KW8C-4*	8000	12	8	12	30	↓	↓	↓	↓
S4KW10C-5*	10000	12	8	12	30	↓	↓	↓	↓
S4KW12C-6*	12000	12	8	12	30	↓	↓	↓	↓

\* add suffix for desired circuit arrangement  
D = doubler, N = Negative center tap, P = positive center tap  
( $I_o \times 0.5$  for doubler)

### MECHANICAL



Dimensions (see drawing)	
B ±0.030"	C ±0.030"
inches	inches
4.78	6.48
7.98	9.68
11.18	12.88
14.38	16.08
17.58	19.28
20.78	22.48

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**CHARACTERISTICS** (apply per leg)

Device Type	Reverse Current @ $V_{RWM}$		Maximum Forward Voltage $V_F @ 12A @ 25^\circ C$	Maximum Reverse Recovery Time <sup>1</sup> $t_{rr} @ 25^\circ C$
	@ 25 °C	@ 100 °C		
	$\mu A$	$\mu A$	Volts	$\mu S$
S4KW2C-1*	↑ 4.0 ↓	↑ 80 ↓	2.00	↑ 2.0 ↓
S4KW4C-2*			4.00	
S4KW6C-3*			6.00	
S4KW8C-4*			8.00	
S4KW10C-5*			10.0	
S4KW12C-6*			12.0	

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

Operating temperature range      -55 °C to +150 °C  
Storage temperature range          -55 °C to +150 °C

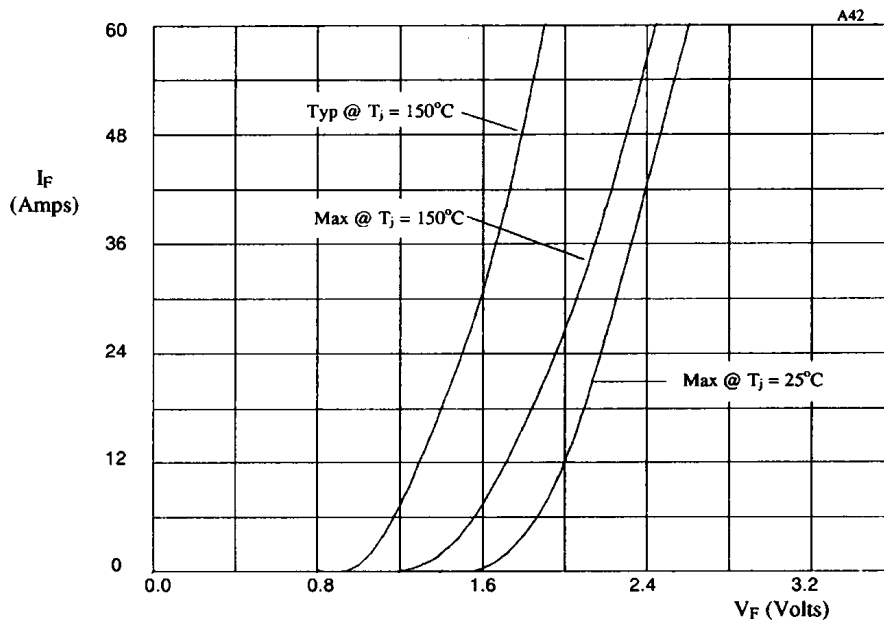


Figure 1. Forward voltage drop per leg as a function of forward current for use with table 1.

TABLE I

DEVICE	X-axis
S4KW2C-1*	x1
S4KW4C-2*	x2
S4KW6C-3*	x3
S4KW8C-4*	x4
S4KW10C-5*	x5
S4KW12C-6*	x6