

## 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

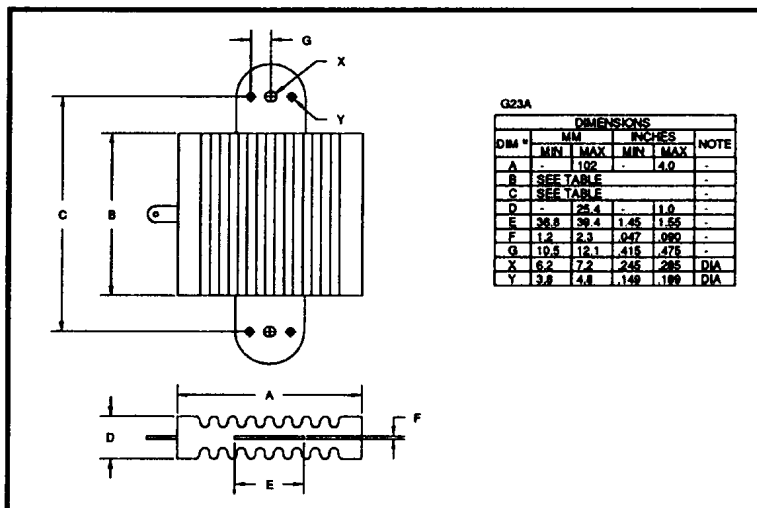
- $V_R = 2kV - 12kV$
- $I_F = 30 - 40A$  (in oil)
- $I_R = 4.0\mu A$
- $I_{FSM} = 500A$

### ABSOLUTE MAXIMUM RATINGS (apply per leg)

Device Type	Working Reverse Voltage $V_{RWM}$ Volts	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
		Amps	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

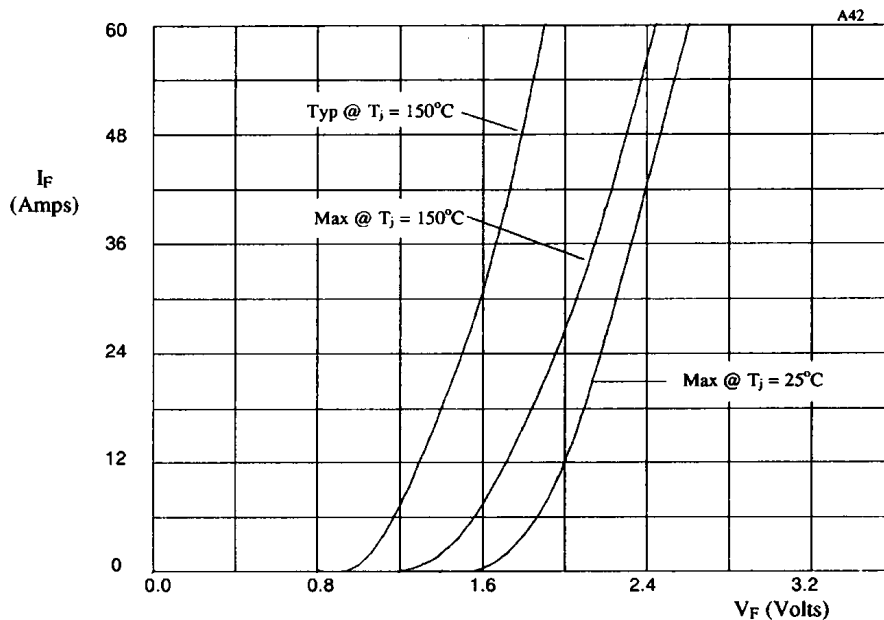


Figure 1. Forward voltage drop per leg as a function of forward current for use with table 1.

TABLE I

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