



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, HIGH DENSITY, STANDARD RECOVERY RECTIFIER ASSEMBLY

- Up to 20A forward current and 24kV reverse voltage
- Air or oil environment
- High reverse surge current
- High thermal shock resistance
- Integral cooling fins

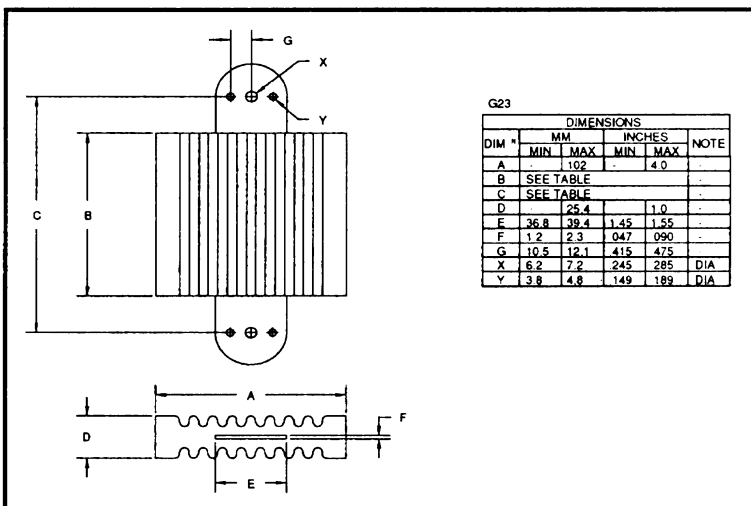
QUICK REFERENCE DATA

- $V_R = 4kV - 24kV$
- $I_F = 8.0 - 20.0A$ (in oil)
- $I_R = 4.0\mu A$
- $I_{FSM} = 500A$

ABSOLUTE MAXIMUM RATINGS

Device Type	Working Reverse Voltage V_{RWM}	Average Rectified Current $I_{F(AV)}$				1 Cycle Surge Current $t_p = 8.3mS$ I_{FSM}		Repetitive Surge Current I_{FRM}	I^2t $t_p = 8.3mS$
		air @ 25 °C	air @ 65 °C	forced air 600CFM @ 55°C	still oil @ 55 °C	@ 25 °C	@ 100 °C	@ 25 °C	@ 25 °C
		Volts	Amps	Amps	Amps	Amps	Amps	Amps	A ² S
S4KW4KA-1	4000	8.0	5.4	16.0	20.0	↑ 500 ↓	↑ 300 ↓	↑ 90 ↓	↑ 1000 ↓
S4KW8KA-2	8000	6.0	4.0	12.0	15.0				
S4KW12KA-3	12000	6.0	4.0	12.0	15.0				
S4KW16KA-4	16000	6.0	4.0	12.0	15.0				
S4KW20KA-5	20000	6.0	4.0	12.0	15.0				
S4KW24KA-6	24000	6.0	4.0	12.0	15.0				

MECHANICAL



Dimensions (see drawing)	
B (max)	C (max)
inches	inches
4.780	6.480
7.980	9.680
11.18	12.88
14.38	16.08
17.58	19.28
20.78	22.48

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CHARACTERISTICS

Device Type	Maximum Reverse Leakage Current I_R @ V_{RWM}		Maximum Forward Voltage V_F @ 12.0A @ 25°C	Maximum Reverse Recovery Time ¹ t_{rr} @ 25°C
	@ 25 °C	@ 100 °C		
	μA	μA	Volts	μS
S4KW4KA-1	↑ 4.0 ↓	↑ 80 ↓	4.0	↑ 2.0 ↓
S4KW8KA-2			8.0	
S4KW12KA-3			12.0	
S4KW16KA-4			16.0	
S4KW20KA-5			20.0	
S4KW24KA-6			24.0	

¹ Measured on discrete devices prior to assembly

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

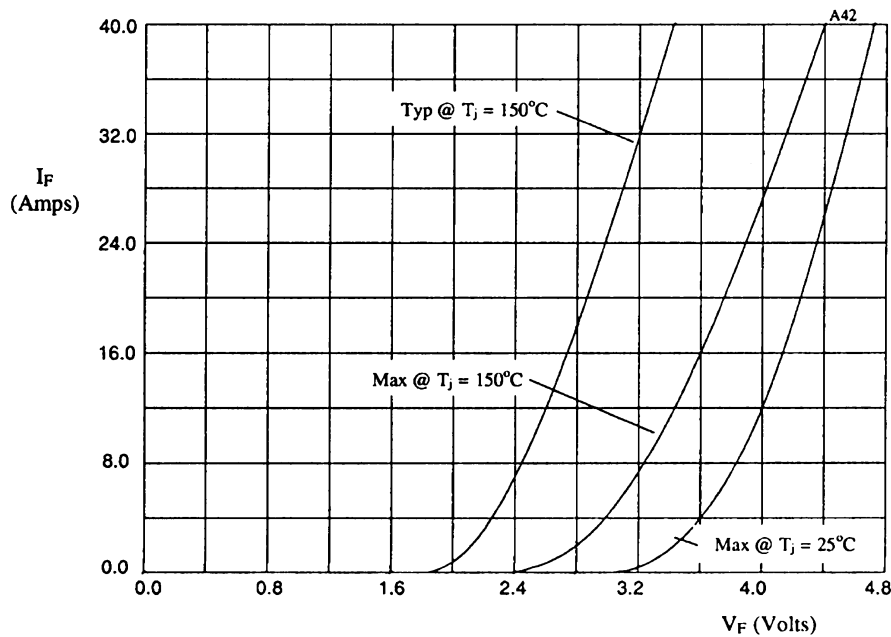


Figure 1. Forward voltage drop as a function of forward current.

TABLE I

DEVICE	X-axis
S4KW4KA-1	x1
S4KW8KA-2	x2
S4KW12KA-3	x3
S4KW16KA-4	x4
S4KW20KA-5	x5
S4KW24KA-6	x6