



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 DENSITY, HIGH VOLTAGE, STANDARD RECOVERY RECTIFIER ASSEMBLY

- High reverse voltages
- Low reverse leakage current
- Low distributed and ground capacitance
- Corona free design
- Air or oil environments

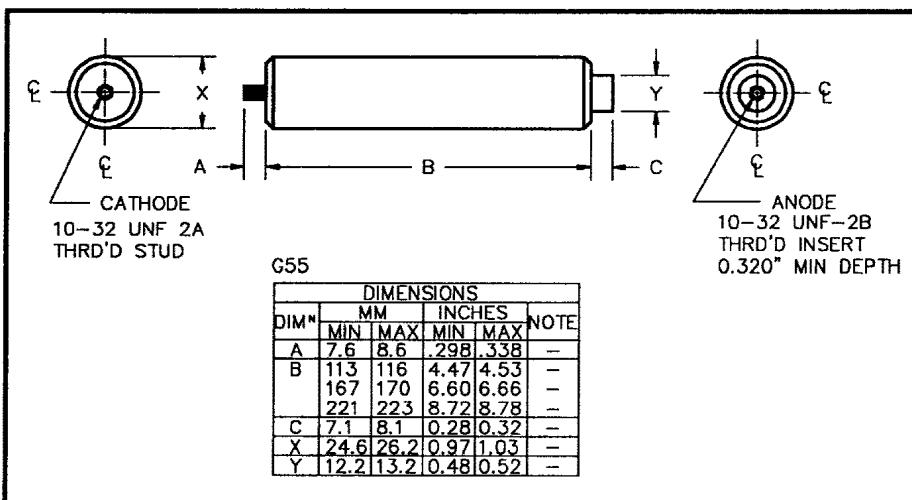
### QUICK REFERENCE DATA

- $V_R = 33\text{kV} - 66\text{kV}$
- $I_F = 300\text{mA}$
- $t_{rr} = 2.5\mu\text{s}$
- $I_R = 1.0\mu\text{A}$

### ABSOLUTE MAXIMUM RATINGS

	Symbol	SCKV33K12	SCKV45K12	SCKV66K12	Unit
Working reverse voltage	$V_{RWM}$	33	45	66	kV
Surge reverse voltage	$V_{RSM}$	36.3	49.5	72.6	kV
Average forward current in air @ 25°C in oil @ 55°C in forced air 600 CFM	$I_{F(AV)}$	← 300 → ← 1200 → ← 600 →			mA mA mA
Non-repetitive surge current $t_p = 8.3\text{ms}$ , @ 25°C	$I_{FSM}$	← 14.0 →			A
Storage temperature range	$T_{STG}$	← -55 to +150 →			°C
Operating temperature range	$T_{OP}$	← -55 to +150 →			°C
Body length Max.	dim B	4.53	6.66	8.78	inches

### MECHANICAL



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### ELECTRICAL CHARACTERISTICS

	Symbol	SCKV33K12	SCKV45K12	SCKV66K12	Unit
Max. forward voltage drop @ $I_F = 1.0A$ , $T_j = 25^\circ C$	$V_F$	60.0	95.0	125.5	V
Max. reverse leakage current @ $V_{RWM}$ , $T_j = 25^\circ C$	$I_R$	←	1.0	→	$\mu A$
@ $V_{RWM}$ , $T_j = 100^\circ C$	$I_R$	←	20	→	$\mu A$
Max. reverse recovery time 0.5A $I_F$ to 1.0A $I_R$ . Recovers to 0.25A $I_{RR}$ .	$t_{rr}$	←	2.5	→	$\mu S$
Max. fusing current $t_p = 8.3ms$	$I^2t$	←	0.8	→	$A^2S$

1. Measured on discrete devices prior to assembly

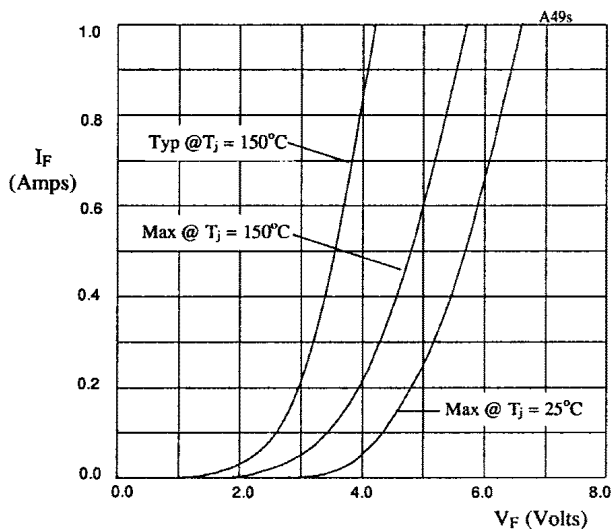


Fig 1. Forward voltage drop as a function of forward current for use with multiplication table.

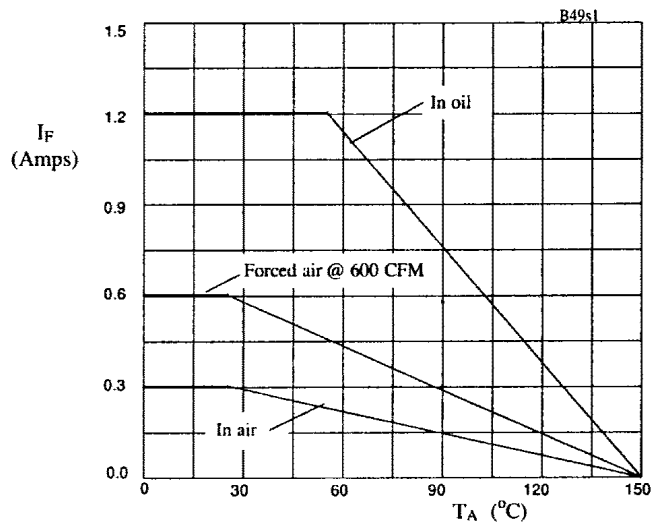


Fig 2. Maximum average forward current against ambient temperature.

Multiplication tables for fig 1.

SCKV33K12	X-axis x12
SCKV45K12	X-axis x19
SCKV66K12	X-axis x25