



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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### QUICK REFERENCE DATA

- $V_R = 2kV - 3kV$
- $I_F = 330mA$
- $t_{rr} = 2.0\mu S$
- $I_R = 0.25\mu A$

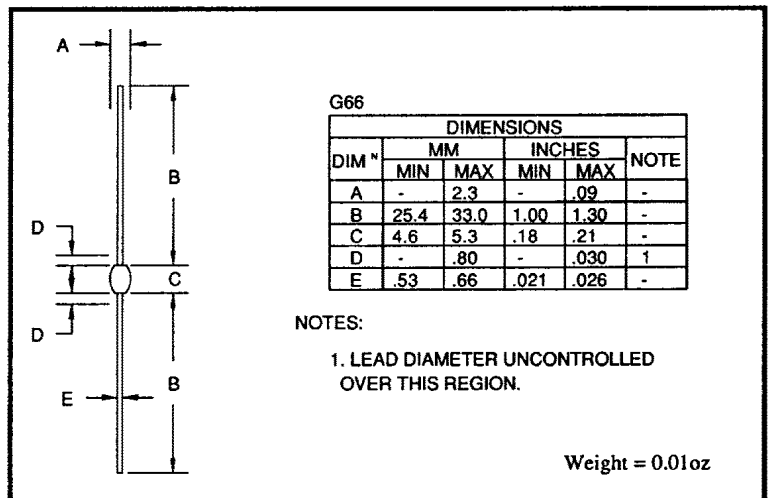
### AXIAL LEADED HERMETICALLY SEALED HIGH VOLTAGE STANDARD RECOVERY RECTIFIER DIODE

- High thermal shock resistance
- Hermetically sealed with Metoxilite fused metal oxide
- Low reverse leakage currents
- Miniature packaging
- Monolithic cavity free

### ABSOLUTE MAXIMUM RATINGS (@ 25°C unless otherwise specified)

	Symbol	M20	M30	Unit
Working reverse voltage	$V_{RWM}$	2000	3000	V
Repetitive reverse voltage	$V_{RRM}$	2000	3000	V
Surge reverse voltage	$V_{RSM}$	2000	3000	V
Average forward current (@ 55°C in oil)	$I_{F(AV)}$	← 330 →		mA
Repetitive surge current (@ 55°C)	$I_{FRM}$	← 1.3 →		A
Non-repetitive surge current ( $t_p = 8.3mS$ , @ $V_R$ & $T_{jmax}$ )	$I_{FSM}$	← 7.0 →		A
Storage temperature range	$T_{STG}$	-65 to +175		°C
Operating temperature range	$T_{OP}$	-65 to +175		°C

### MECHANICAL



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### CHARACTERISTICS (@ 25°C unless otherwise specified)

	Symbol	M20	M30	Unit
Average forward current for sine wave - max. pcb mounted; T <sub>A</sub> = 55°C	I <sub>F(AV)</sub>	← 175 →	← 330 →	mA
- max. in unstirred oil	I <sub>F(AV)</sub>	← 330 →	← 330 →	mA
I <sup>2</sup> t for fusing (t = 8.3mS) max.	I <sup>2</sup> t	← 0.2 →	← 0.2 →	A <sup>2</sup> S
Forward voltage drop max. @ I <sub>F</sub> = 125mA, T <sub>j</sub> = 25°C	V <sub>F</sub>	← 5.0 →	← 5.0 →	V
Reverse current max. @ V <sub>RWM</sub> , T <sub>j</sub> = 25°C	I <sub>R</sub>	← 0.25 →	← 0.25 →	μA
@ V <sub>RWM</sub> , T <sub>j</sub> = 100°C	I <sub>R</sub>	← 10 →	← 10 →	μA
Reverse recovery time max. 50mA I <sub>F</sub> to 100mA I <sub>R</sub> . Recover to 25mA I <sub>RR</sub> .	t <sub>rr</sub>	← 2.0 →	← 2.0 →	μS
Junction capacitance typ. @ V <sub>R</sub> = 5V, f = 1MHz	C <sub>j</sub>	← 1.7 →	← 1.7 →	ρF
Thermal resistance - junction to oil Unstirred @ 55°C	R <sub>θJO</sub>	← 48 →	← 48 →	°C/W
Stirred @ 55°C	R <sub>θJO</sub>	← 30 →	← 30 →	°C/W
Thermal resistance - junction to amb. on 0.06" thick pcb. 1oz copper.	R <sub>θJA</sub>	← 120 →	← 120 →	°C/W

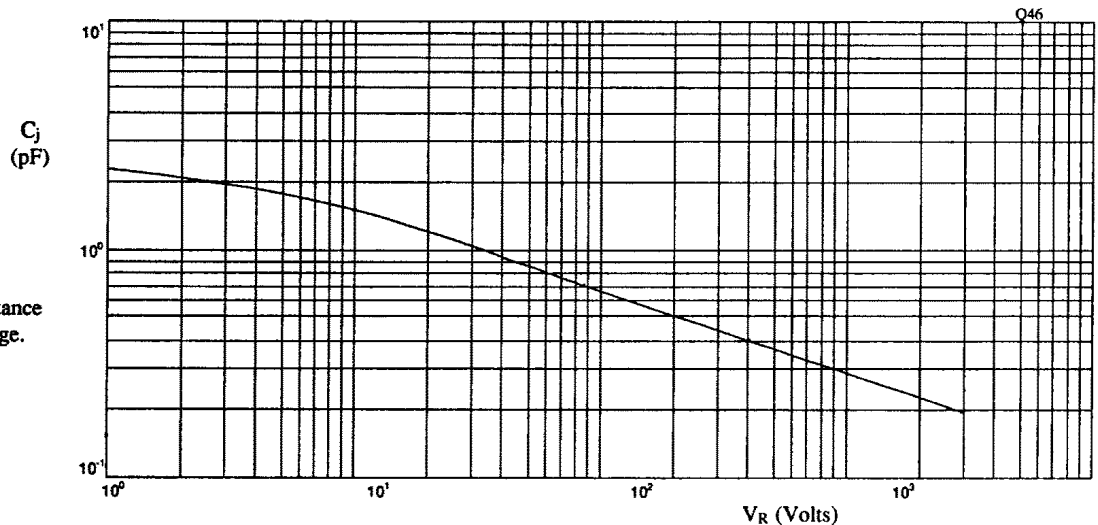


Fig 1. Junction capacitance against reverse voltage.

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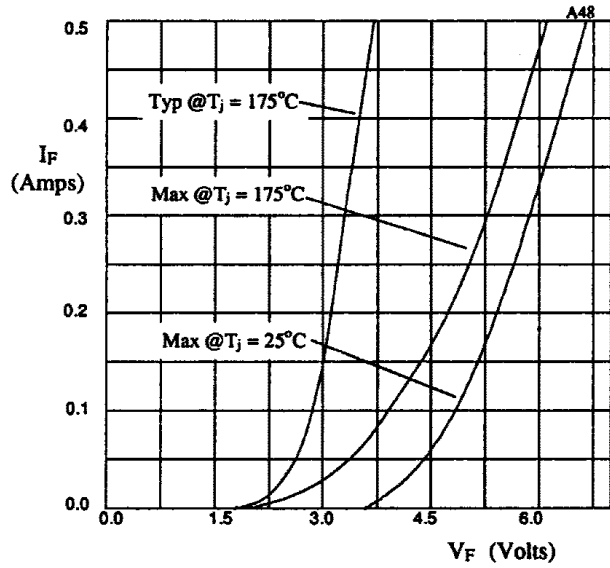


Fig 2. Forward voltage drop as a function of forward current.

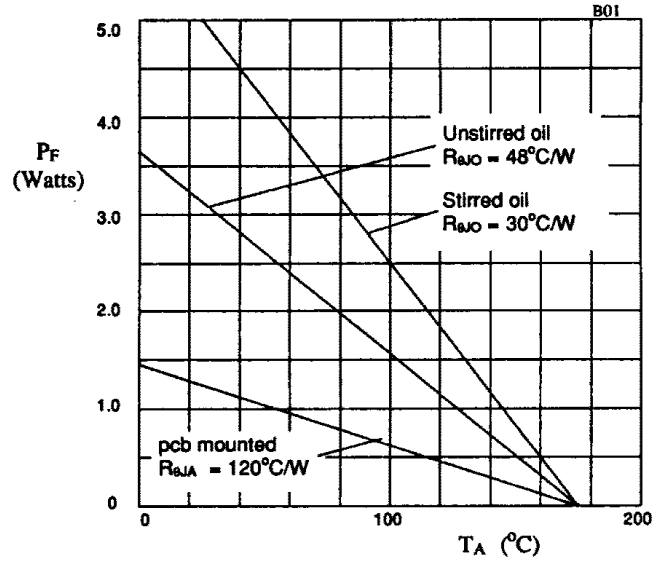


Fig 3. Power derating in air and oil.

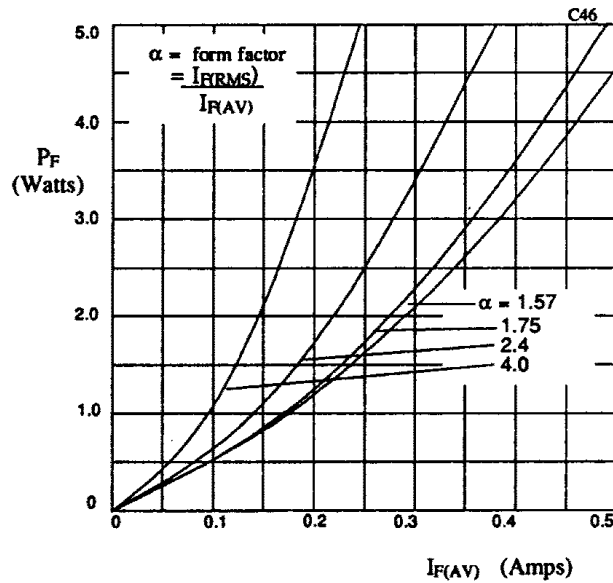


Fig 4. Forward power dissipation as a function of forward current, for sinusoidal operation.