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!

Contact us

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Surface Mount Silicon Bridge Rectifiers

COMCHIP
SMD DIODE SPECIALIST

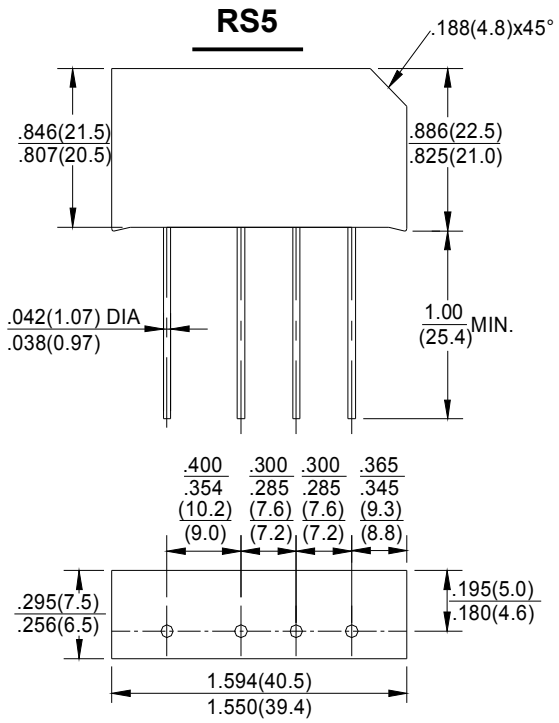
RS501-G thru RS507-G

"-G" : RoHS Device

REVERSE VOLTAGE - **50** to **1000** Volts
FORWARD CURRENT - **5.0** Amperes

FEATURES

- Plastic material used carries UL recognition 94V-0
- High surge current capability
- Ideal for printed circuit board
- Typical IR less than 1mA
- Built-in printed board stand offs
- High temperature soldering guaranteed: 250℃ for 5 seconds



Dimensions in inches and (milimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25℃ ambient temperature unless otherwise specified.

resistive or inductive load at 50HZ or 60HZ.

CHARACTERISTICS	SYMBOL	RS501	RS502	RS503	RS504	RS505	RS506	RS507	UNIT
Maximum Recurrent Peak Reverse Voltage	V_{RM}	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	400	700	V
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum Repetitive Peak Reverse Voltage (Note1)	V_{RRM}	100	190	300	600	900	1200	1500	V
Maximum Average Forward Output Current I_{FAVM} natuer cooling, T_A=45℃ C-Load	$I_{(A)}$				3.3				A
R+L-Load					4.0				
on chassis=31in^2 ,200cm^2 , T_A=45℃ C-Load					5.0				
R+L-Load					6.0				
Maximum Repetitive Peak Forward Surge Current I_{FSM}	A_{PK}				30				A
Peak Forward Surge Current Single @T_J=25℃	I_{FSM}				250				A_{PK}
Sine-Wave on Reated Load (JEDEC Method) @T_J=150℃					200				
I^2t Rating for Fusing @T_J=25℃	I^2t				312				A^2S
(t<8.3ms) @T_J=150℃					200				
Maximum Series Resistance at V_{RMS}		0.15	0.3	0.6	1.2	1.8			OHM
Maximum Reservoir Capacitor		10000	5000	5000	2500	1000			uF
Maximum Reverse Current at @T_J=25℃	I_R				10.0				μA
Rated Repetitive Peak Voltage @T_J=150℃					6.0				mA
Maximum instantaneous Forward Drop per Element at 5.0A	V_F				1.0				V
Operating and Storage Temperature Range	T_J,T_{STG}				-55 to +125				℃

NOTES:1.Valid for each bridge element.

RATINGS AND CHARACTERISTIC CURVES RS501-G thru RS507-G

FIG.1-DERATING CURVE FOR
OUTPUT RECTIFIED CURRENT

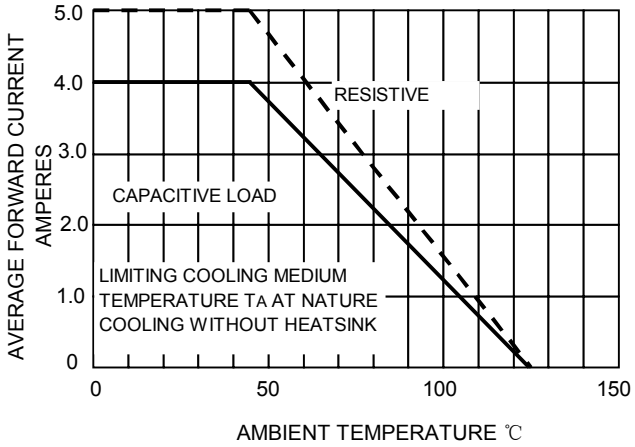


FIG.2- DERATING CURVE FOR
OUTPUT RECTIFIED CURRENT

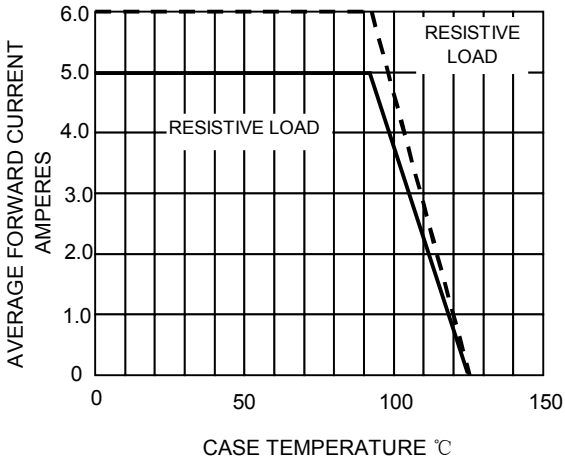


FIG.3-TYPICAL INSTANTANEOUS FORWARD
CHARACTERISTIC PER BRIDGE ELEMENT

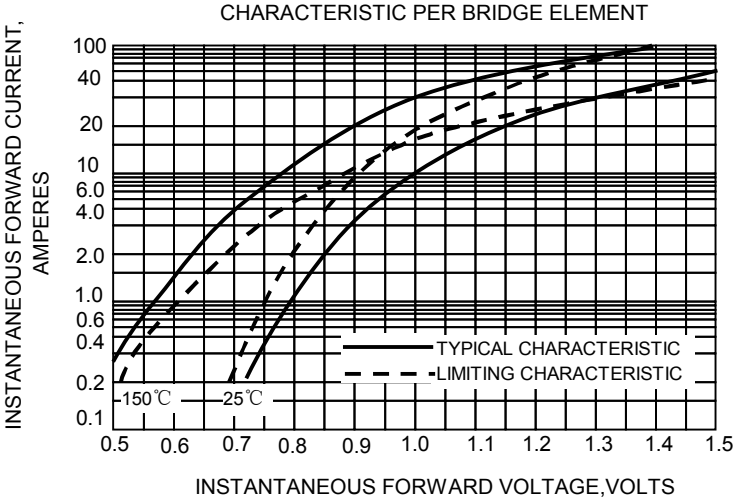


FIG.4-MAXIMUM NON-REPETITIVE PEAK
FORWARD SURGE CURRENT

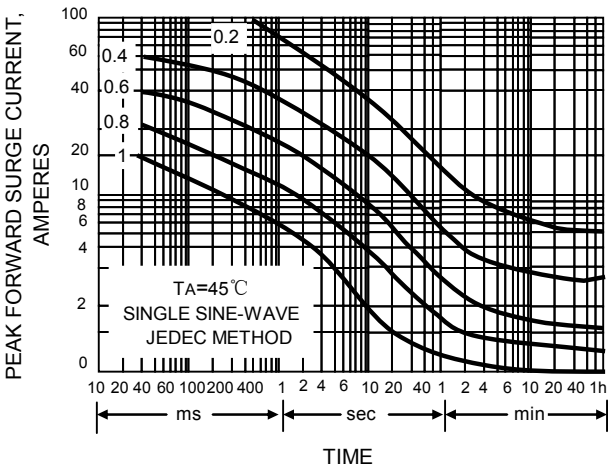


FIG.5-MAXIMUM TOTAL BRIDGE POWER
DISSIPATION

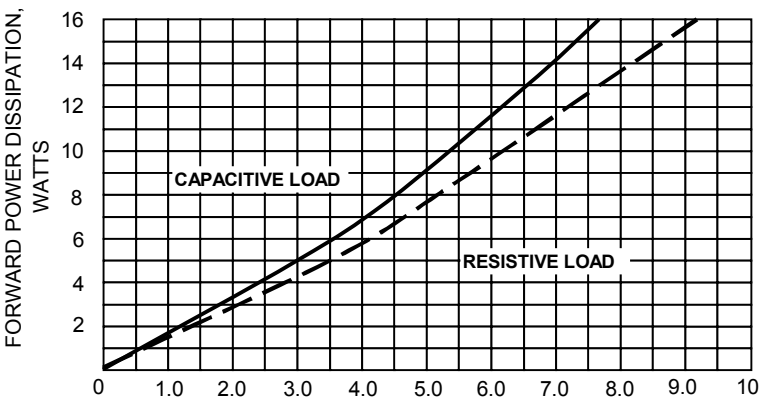


FIG.6-MEAN AVERAGE FORWARD CURRENT
CASE TEMPERATURE