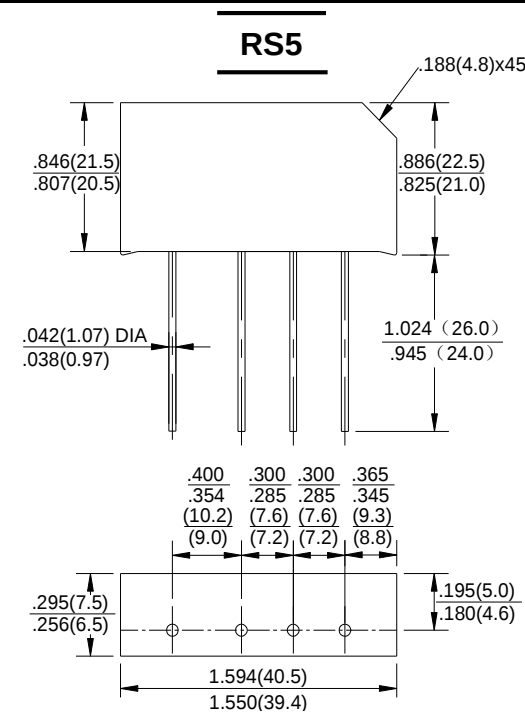




RS501 thru RS507

SILICON BRIDGE RECTIFIERS	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 ● Built-in printed board stand offs	 Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25°C 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 R+L-Load on chassis=31in ² ,200cm ² ,T _A =45℃ C-Load R+L-Load	I _A	3.3 4.0 5.0 6.0							A
Maximum Repetitive Peak Forward Surge Current I _{FSM}	A _{PK}	30							A
Peak Forward Surge Current Single @T _J =25℃ Sine-Wave on Reated Load (JEDEC Method) @T _J =150℃	I _{FSM}	250 200							A
I ² t Rating for Fusing @T _J =25℃ (t<8.3ms) @T _J =150℃	I ² t	312 200							A ² S
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℃ Rated Repetitive Peak Voltage @T _J =150℃	I _R	10.0 6.0							μA mA
Maximum instantaneous Forward Drop per Element at 5.0A	V _F	1.0							V
Operating Temperature Range	T _J	-55 to+150							℃
Storage Temperature Range	T _{STG}	-55 to+150							℃

NOTES:1.Valid for each bridge element.

REV. 2, 22-Aug-2012

RATING AND CHARACTERISTIC CURVES

RS501 thru RS507



FIG.1-DERATING CURVE FOR
OUTPUT RECTIFIED CURRENT

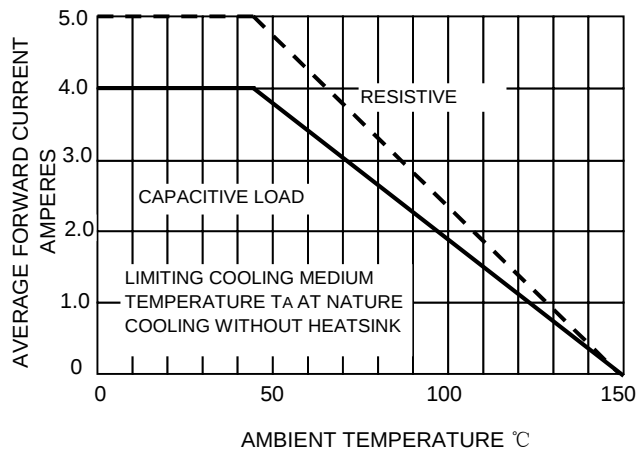


FIG.2- DERATING CURVE FOR
OUTPUT RECTIFIED CURRENT

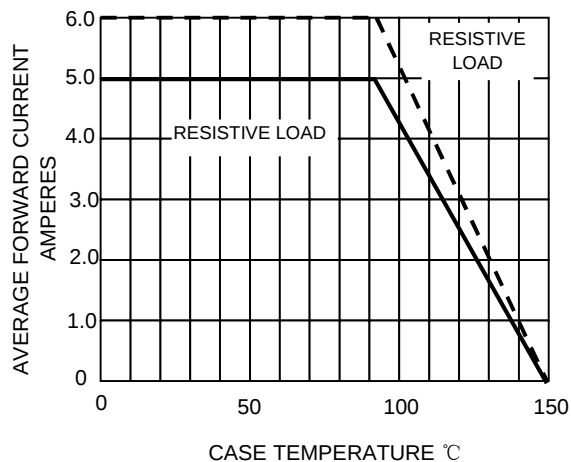


FIG.3-TYPICAL INSTANTANEOUS FORWARD
CHARACTERISTIC PER BRIDGE ELEMENT

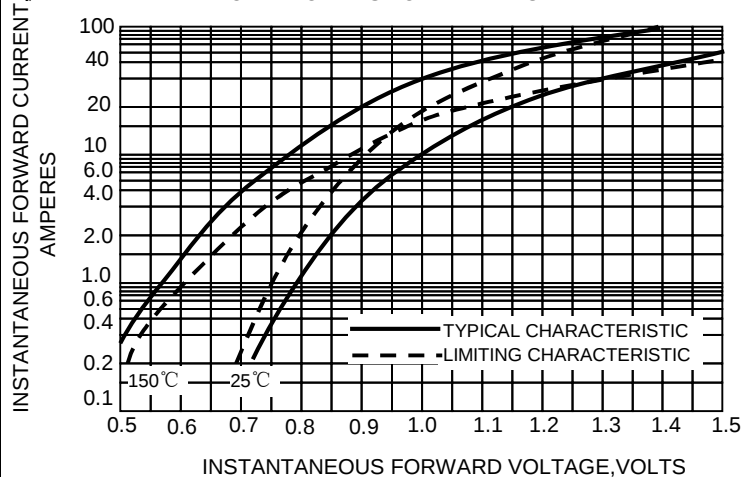


FIG.4-MAXIMUM NON-REPETITIVE PEAK
FORWARD SURGE CURRENT

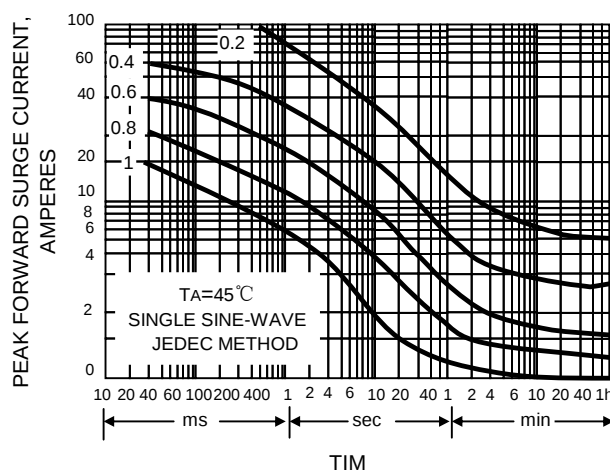


FIG.5-MAXIMUM TOTAL BRIDGE POWER
DISSIPATION

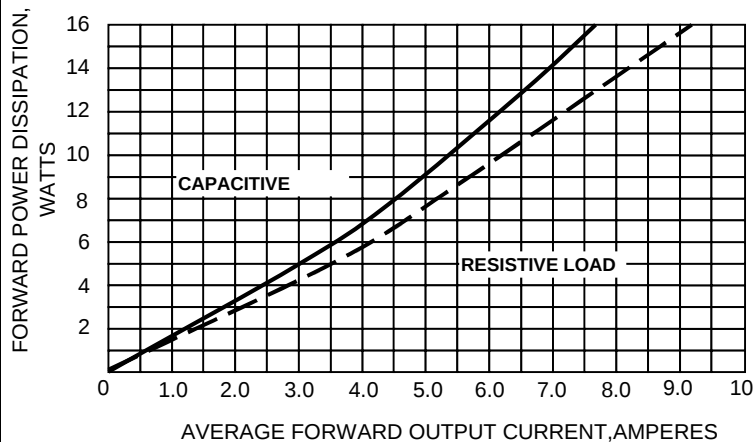


FIG.6-MEAN AVERAGE FORWARD
CURRENT

