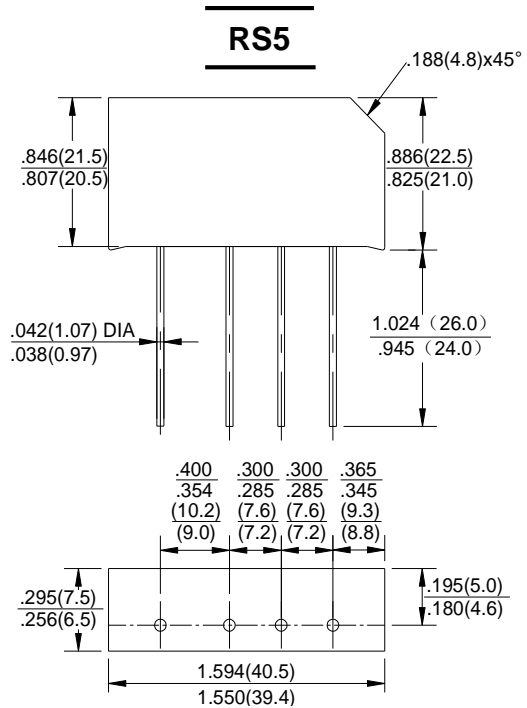


SILICON BRIDGE RECTIFIERS

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



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

NOTES:1.Valid for each bridge element.

FIG.1-DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

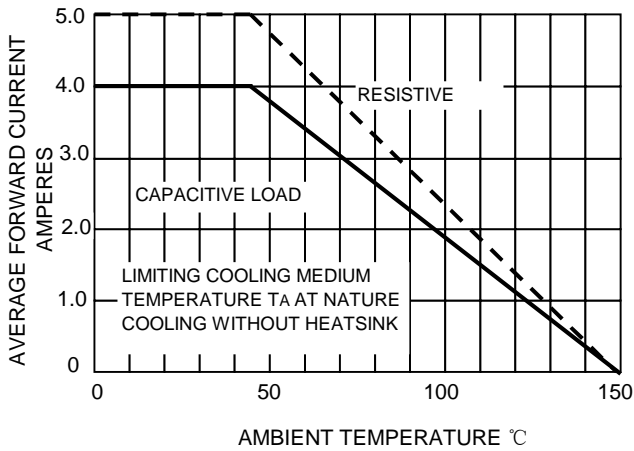


FIG.2- DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

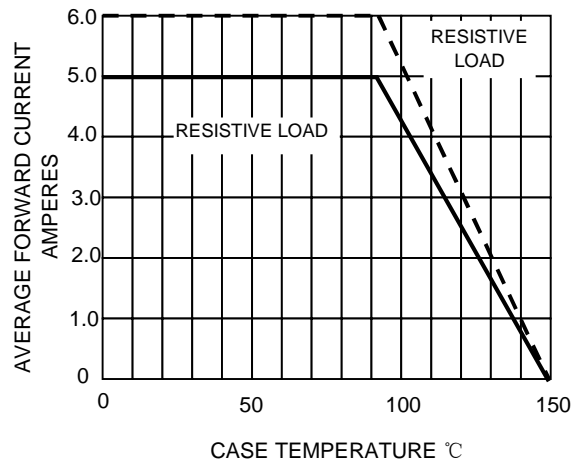


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTIC PER BRIDGE ELEMENT

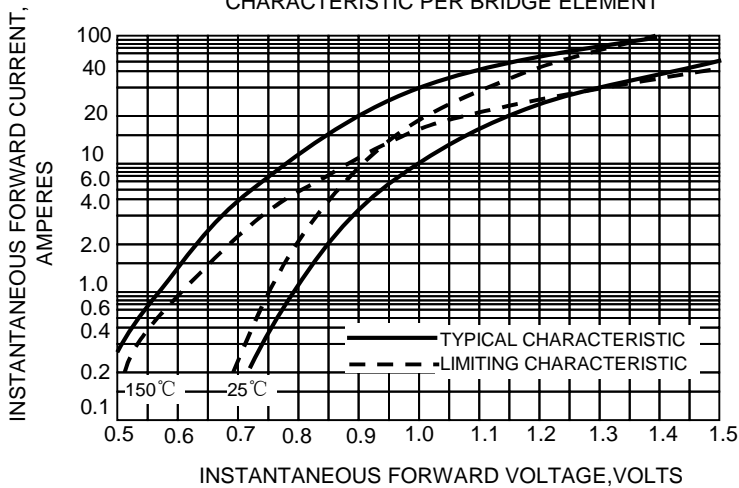


FIG.4-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

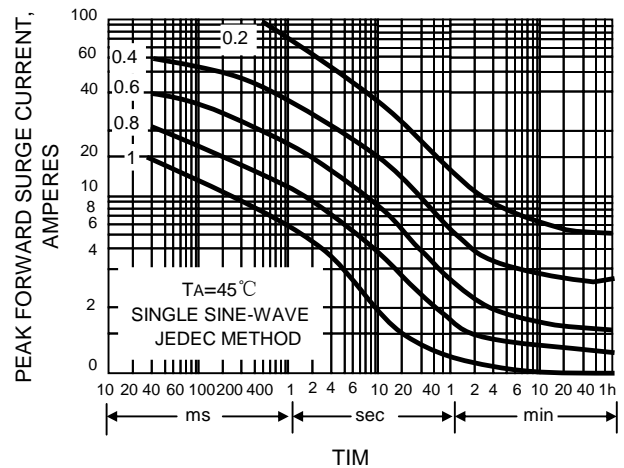


FIG.5-MAXIMUM TOTAL BRIDGE POWER DISSIPATION

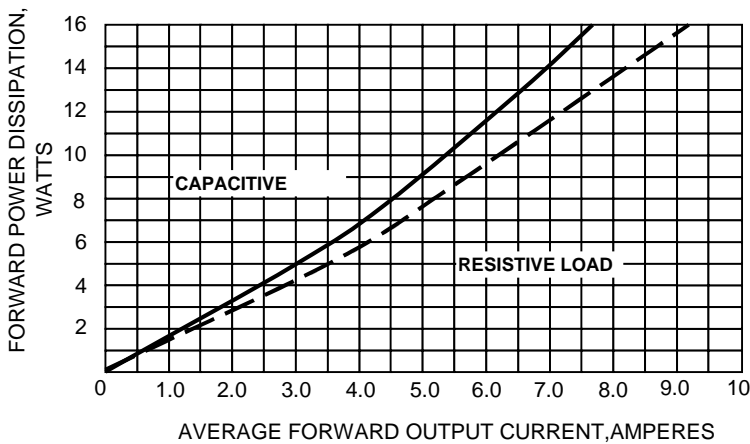


FIG.6-MEAN AVERAGE FORWARD CURRENT

