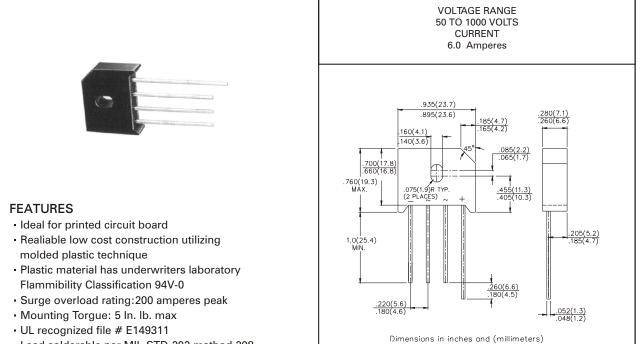
RS6 SERIES

SINGLE-PHASE SILICON BRIDGE





- Lead solderable per MIL-STD-202 mathod 208
- Electrically isolated base 1800Volts



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified. Resistive or inductive load, 60 Hz. For capacitive load, derate current by 20%.

		RS6005	RS601	RS602	RS604	RS606	RS608	RS610	UNITS
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Bridge Input Voltage	V _{RMS}	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V _{DC}	60	100	200	400	600	800	1000	V
Maximum Average Forward@ T_C=100°COutput Current@ T_A=65°C	V _(AV)				6.0 6.0				A A
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load	I _{FSM}	200							А
Maximum DC Forward Voltage drop per element at 3.0A DC	V _F	1						V	
Maximum DC Reverse Current at rated (0 $^{T}_{A}$ =25°C DC Blocking Voltage Per Element (0 $^{T}_{A}$ =100°C	I _R	10							μA
					1				mA
Maximum Themal Resistance (Note 1)	RθJC				4.7				°C/W
Operating Temperature Range	Т _Ј				-55 to +125	5			°C
Storage Temperature Range	T _{STG}				-55 to +150)			°C

RS6 SERIES

SINGLE-PHASE SILICON BRIDGE



RATING AND CHARACTERISTICS CURVES **RS6 SERIES** Fig.2 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS 100 INSTANTANEOUS FORWARD CURRENT. (A) 40 20 Fig.1 - DERATING CURVE OUTPUT RECTIFIED CURRENT 10 AVERAGE FORWARD OUTPUT CURRENT AMPERES 4.0 HEAT-SINK TJ=25°C MOUNTING Pulse Width=300s 6.0 1% OUTY CYCLE 1.0 5.0 0.4 4.0 0.2 3.0 0.1 2.0 0.7 1.3 MOUNTED ON 4x4 INCH 0.6 0.8 0.9 1.0 1.1 1.2 COPER PC BOARD-TA INSTANTANEOUS FORWARD VOLTAGE, (V) 1.0 0.51 1.27mm LEAD LENGTH 0 Fig.4 - TYPICAL REVERSE 0 50 100 150 CHARACTERISTICS TEMPERATURE, °C 10 INSTANTANEOUS REVERSE CURRENT, MICROAMPERES T_C=100℃ 1.0 Fig.3 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT 200 175 0.1 150 T_J=150℃ 8.3ms Single Half-Wave JEDEC Method $T_A = 25^{\circ}C$ 125 .01 20 120 140 0 40 60 80 100 100 PERCENT OF RATED PEAK REVERSE VOLTAGE 75 Fig.5 - TYPICAL JUNCTION CAPACITANCE 50 PER ELEMENT 250 25 10 100 1 ЪF 200 CAPACITANCE, NUMBER OF CYCLES AT 60 Hz T_J=25°C 150 100 50 .01 10 100 1 **REVERSE VOLTAGE, VOLTS**