

**SINGLE-PHASE GLASS PASSIVATED
SILICON BRIDGE RECTIFIER**

VOLTAGE RANGE 50 to 1000 Volts CURRENT 20Amperes

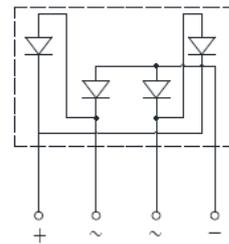
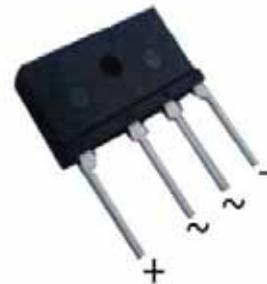
FEATURES

- * Low leakage
- * Low forward voltage
- * Mounting position : Any
- * Surge overload rating: 240 Amperes peak
- * Ideal for printed circuit boards
- * MSL: Level 1

MECHANICAL DATA

- * Epoxy: Device has UL flammability classification 94V-O

RS-20MLS



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25 °C ambient temperature unless otherwise specified.
resistive or inductive load.

MAXIMUM CHARACTERISTICS (@ TA = 25°C unless otherwise noted)

CHARACTERISTICS	SYMBOL	RS2001MLS	RS2002MLS	RS2003MLS	RS2004MLS	RS2005MLS	RS2006MLS	RS2007MLS	UNITS
Maximum Recurrent Peak Reverse Voltage	VRRM	50	100	200	400	600	800	1000	Volts
Maximum RMS Bridge Input Voltage	VRMS	35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage	VDC	50	100	200	400	600	800	1000	Volts
Maximum Average Forward Rectified Output Current at Tc=90 °C degree with heatsink	Io	20							Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load	IFSM	240							Amps
Typical Current Square Time	I ² T	239							A ² S
Insulation voltage	Viso	3000							Volts
Typical Thermal Resistance from junction to ambient	RθJA	13							°C/W
Typical Thermal Resistance from junction to case	RθJC	1.4							
Operating and Storage Temperature Range	TJ,TSTG	-55 to + 150							°C

ELECTRICAL CHARACTERISTICS (@ TA = 25°C unless otherwise noted)

CHARACTERISTICS	SYMBOL	RS2001MLS	RS2002MLS	RS2003MLS	RS2004MLS	RS2005MLS	RS2006MLS	RS2007MLS	UNITS
Maximum Forward Voltage Drop per element at 10A DC	VF	1.0							Volts
Maximum Reverse Current at Rated DC Blocking Voltage per element	@TA=25 °C	5.0							μAmps
	@TA=150 °C	1.0							mAmps

Note: "ROHS compliant".

RATING AND CHARACTERISTICS CURVES (RS2001MLS THRU RS2007MLS)

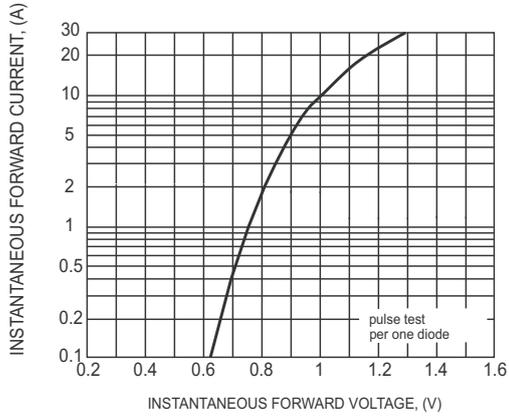


FIG.1 MAXIMUM INSTANTANEOUS FORWARD CHARACTERISTICS

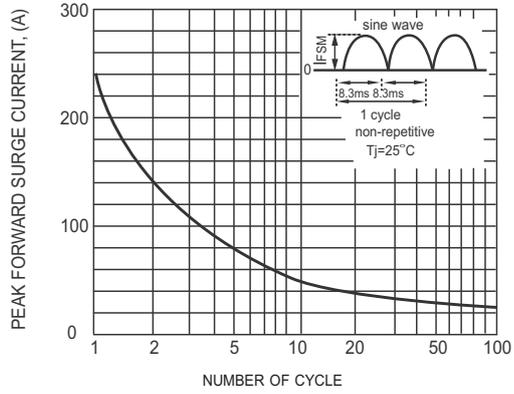


FIG.2 SURGE FORWARD CURRENT CAPABILITY

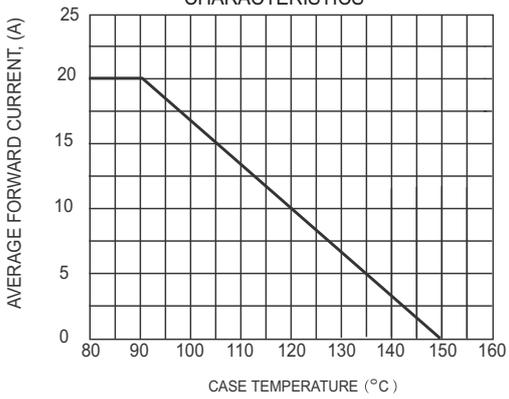


FIG.3 TYPICAL FORWARD CURRENT DERATING CURVE

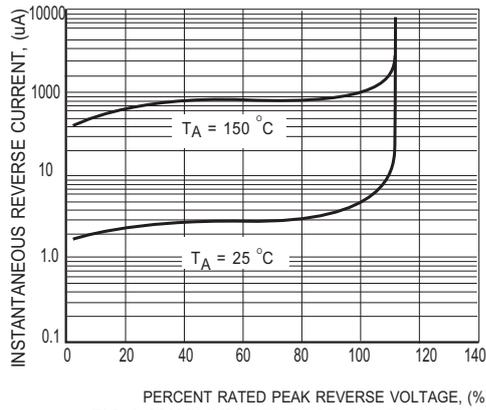
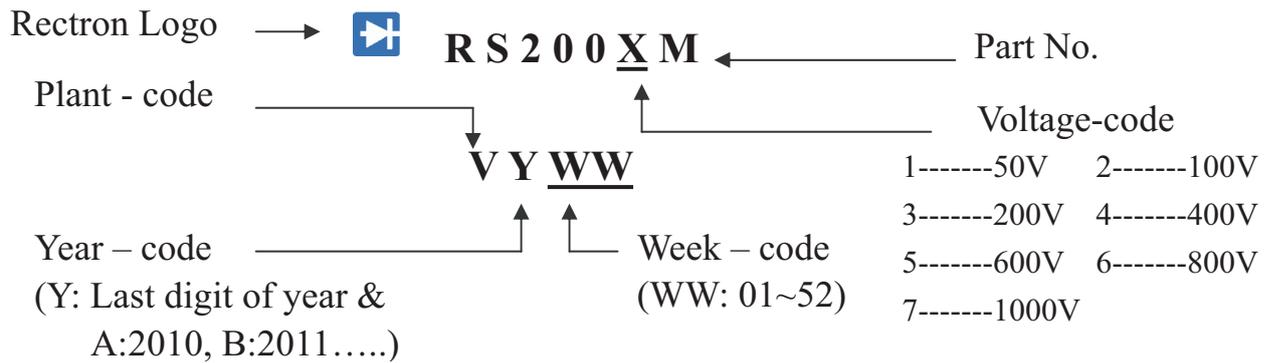
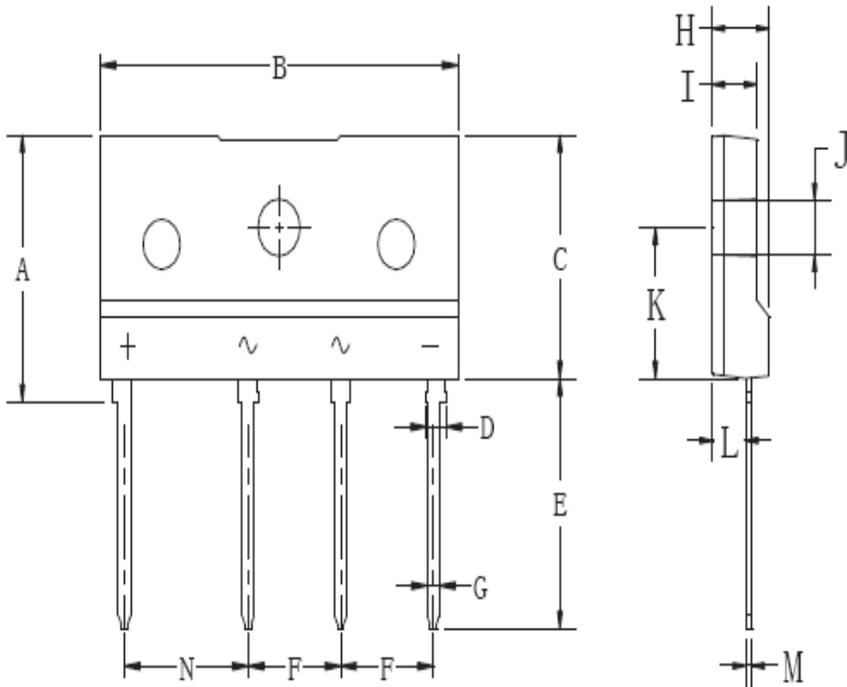


FIG.4 MAXIMUM REVERSE CHARACTERISTICS

Marking Description



RS-20MLS



Dimensions in millimeters

Dim	Min	Max
A	15.6	16.2
B	28.7	29.3
C	14.2	14.8
D	1.5	1.7
E	14.6	15.2
F	7.3	7.7
G	0.9	1.1
H	4.3	4.9
I	3.3	3.9
J	3.1	3.4
K	8.7	9.3
L	2.5	2.9
M	0.4	0.6
N	9.8	10.2

PACKAGING OF DIODE AND BRIDGE RECTIFIERS

BULK PACK

PACKAGE	PACKING CODE	EA PER BOX	INNER BOX SIZE (mm)	CARTON SIZE (mm)	EA PER CARTON	GROSS WEIGHT(Kg)
RS-20MLS	-B	250	300*138*35	319*296*165	2000	9.7

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