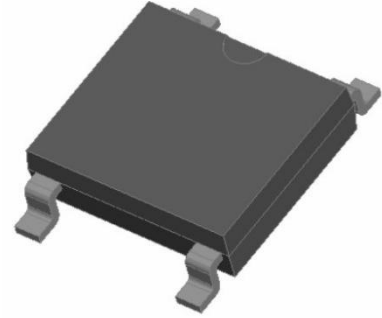


# ABS1510

## Bridge Rectifiers

### Features

- High efficiency
- Ideal for automated placement
- High surge current capability
- Meets MSL level 1, per J-STD-020, LF maximum peak of 260 °C

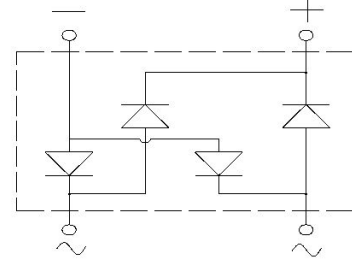


### Typical Applications

General purpose use in AC/DC bridge full wave rectification for power supply, lighting ballast, battery charger, home appliances, office equipment, and telecommunication applications.

### Mechanical Data

- Package:ABS
- Molding compound meets UL 94 V-0 flammability rating, RoHS-compliant
- Terminals: Tin plated leads, solderable per J-STD-002 and JESD22-B102
- Polarity: As marked on body.



### ■ Maximum Ratings (Ta=25°C Unless otherwise specified)

PARAMETER	Symbol	Unit	ABS1510
Maximum Repetitive Peak Reverse Voltage	V <sub>RRM</sub>	V	1000
Maximum RMS Voltage	V <sub>RMS</sub>	V	700
Maximum DC blocking Voltage	V <sub>DC</sub>	V	1000
Average Forward Current @Half-sine wave, Resistance load, Tc(Fig.1), On alumina substrate	I <sub>o</sub>	A	1.5
Forward Surge Current (Non-repetitive) @60HZ sine wave, 1 cycle, Ta=25°C	I <sub>FSM</sub>	A	40
Current squared time @1ms≤t≤8.3ms Ta=25°C, Rating of per diode	I <sup>2</sup> t	A <sup>2</sup> s	6.6
Thermal Resistance(Typical) @Between junction and ambient, On alumina substrate	R <sub>θJ-A</sub>	°C/W	62.5
Storage Temperature	T <sub>stg</sub>	°C	-55 ~ +150
Junction Temperature	T <sub>j</sub>	°C	-55 ~ +150

### ■ Electrical Characteristics (Ta=25°C Unless otherwise specified)

PARAMETER	Symbol	Unit	Conditions	ABS1510
Peak Forward Voltage	V <sub>FM</sub>	V	I <sub>F</sub> = 0.6A	0.95
Peak Reverse Current	I <sub>RRM</sub>	μA	VR = V <sub>DC</sub> @Ta=25°C	10
			VR = V <sub>DC</sub> @Ta=125°C	500

## ■ Characteristics (Typical)

FIG.1:  $I_o$ - $T_a$  Curve

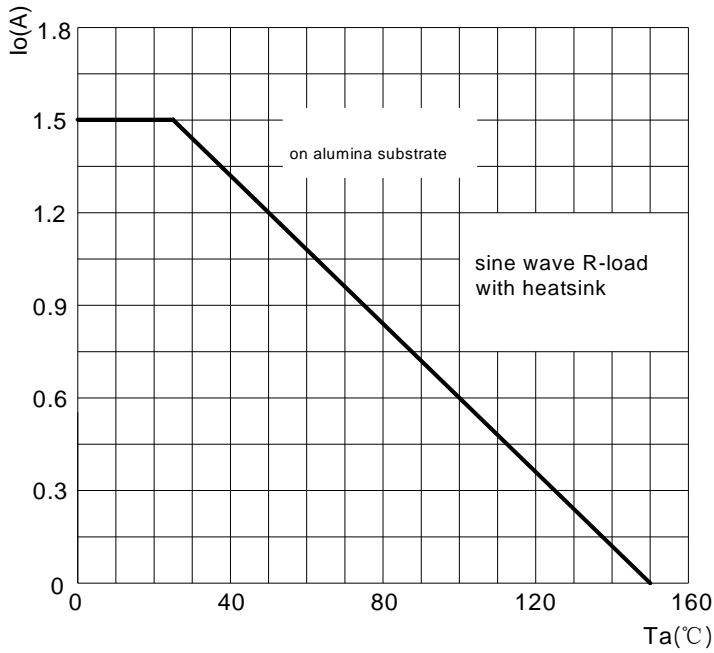


FIG.2: Forward Surge Current Capability

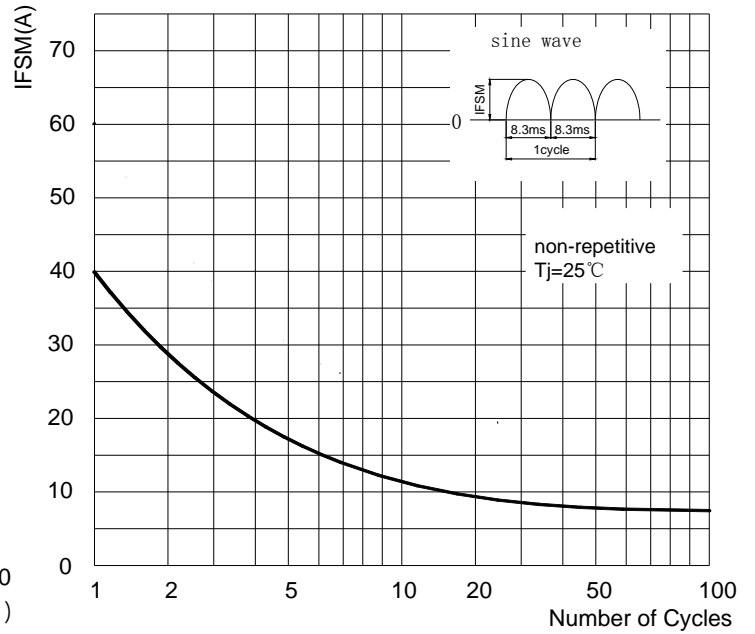


FIG.3: Forward Voltage

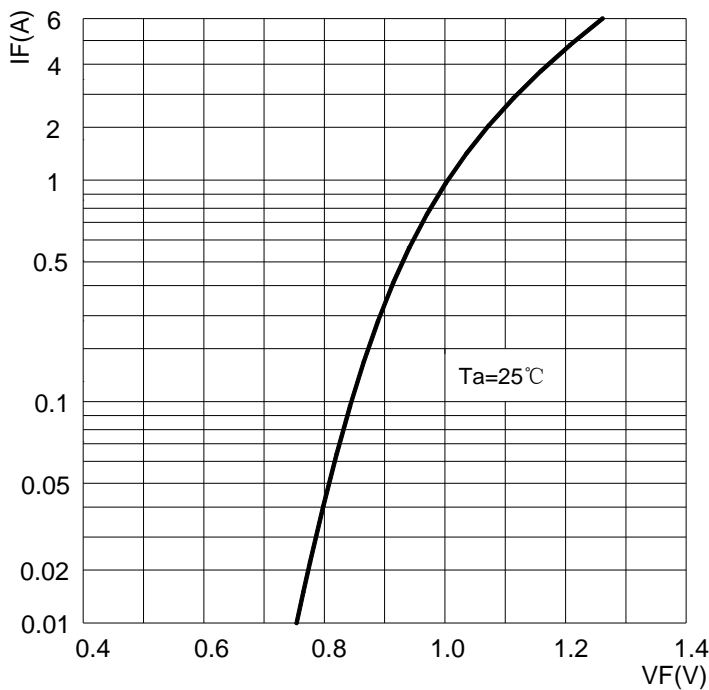
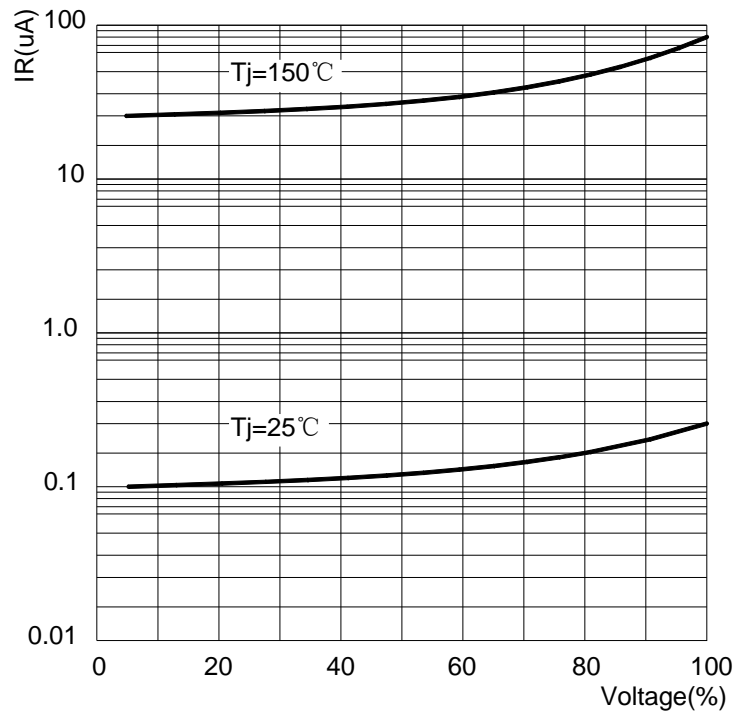


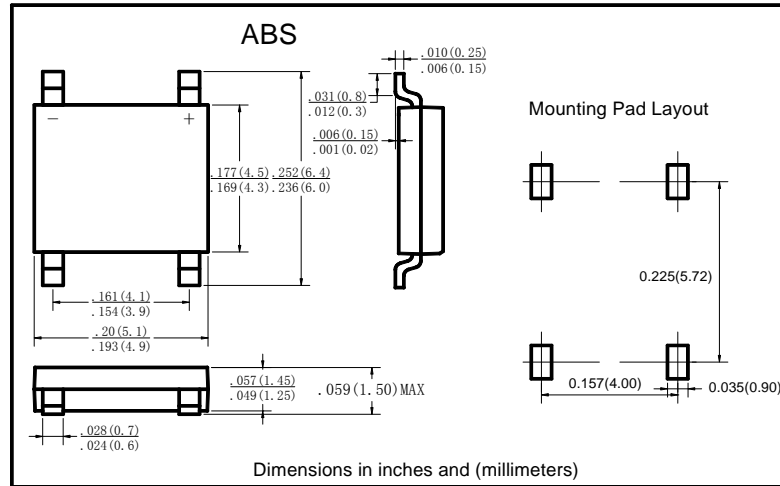
FIG.4: Typical Reverse Characteristics



## ■ Ordering Information (Example)

PREFERED	PACKAGE CODE	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
ABS1510	ABS	5000	10000	80000	13" reel

## ■ Outline Dimensions



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