

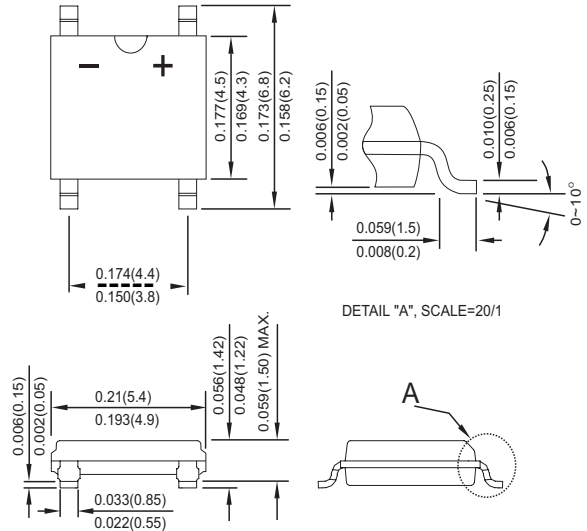
### ABS

### Features

- This series is UL listed under the Recognized Component Index, file number E142814
- The plastic material used carries Underwriters Laboratory flammability recognition 94V-0
- Ideal for printed circuit board application
- High temperature soldering guaranteed 260 °C /5 seconds at 5 lbs (2.3kg) tension

### Mechanical Data

Case: Molded plastic  
 Terminals: Plated leads solderable per MIL-STD-202, Method 208  
 Polarity: Marked on body  
 Mounting Position: Any



### Maximum Ratings & Thermal Characteristics

Rating at 25°C ambient temperature unless otherwise specified, Resistive or Inductive load, 60 Hz.  
 For Capacitive load derate current by 20%.

Parameter	Symbol	ABS 15005	ABS 1501	ABS 1502	ABS 1504	ABS 1506	ABS 1508	ABS 1510	unit
Maximum repetitive peak reverse voltage	VRRM	50	100	200	400	600	800	1000	V
Maximum RMS bridge input voltage	VRMS	35	70	140	280	420	560	700	V
Maximum DC blocking voltage	VDC	50	100	200	400	600	800	1000	V
Maximum average forward rectified output current at TA=40°C	IF(AV)	1.5							A
Peak forward surge current single sine-wave superimposed on rated load (JEDEC Method)	IFSM	50							A
Current squared time t < 8.3ms , Ta = 25°C	I <sup>2</sup> t	10.375							A <sup>2</sup> s
Typical thermal resistance junction to lead	R <sub>θJL</sub>	25							°C/W
On aluminum substrate	R <sub>θJA</sub>	62.5							°C/W
Operating junction and storage temperature range	TJ, TSTG	-55 to + 150							°C

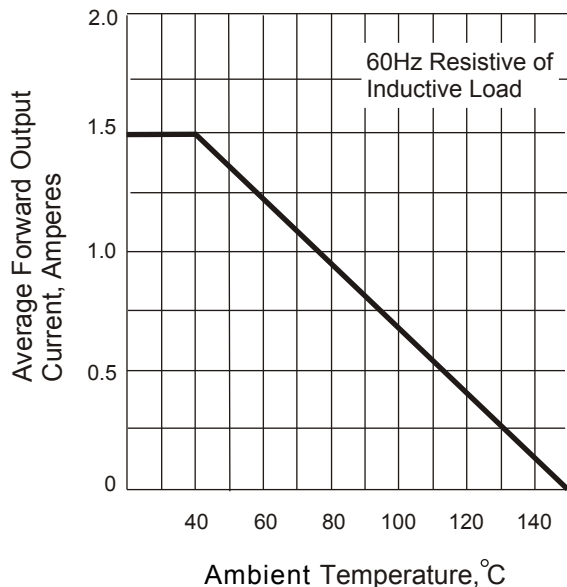
### Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified. Resistive or Inductive load, 60Hz.  
 For Capacitive load derate by 20 %.

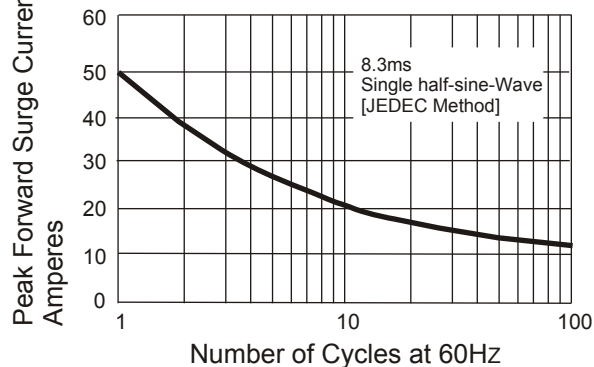
Parameter	Symbol	ABS 15005	ABS 1501	ABS 1502	ABS 1504	ABS 1506	ABS 1508	ABS 1510	Unit
Maximum instantaneous forward voltage drop per leg at 1.5A	VF	1.1							V
Maximum DC reverse current at rated DC blocking voltage per element	IR	10 500							μA

**Notes:** (1) Thermal resistance from Junction to Ambient on P.C.board mounting.  
 (2) Measured at 2.0MHz and applied reverse voltage of 4.0 volts.

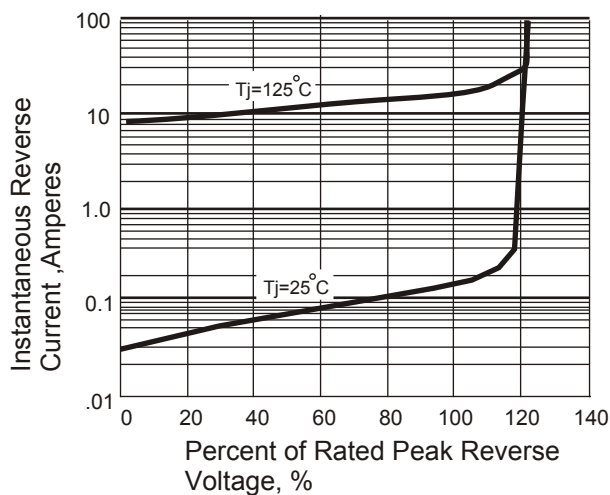
**Fig. 1 Derating Curve for Output Rectified Current**



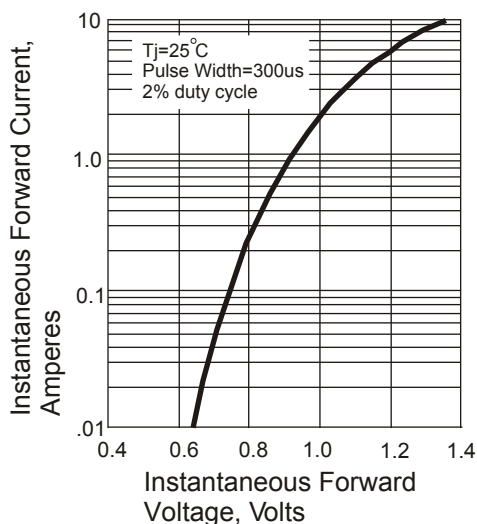
**Fig. 2 Maximum Non-repetitive Peak Forward Surge Current**



**Fig. 4 Typical Revers Characteristics**



**Fig. 3 Typical Instantaneous Forward Characteristics**



**Fig. 5 Typical Junction Capacitance**

