

## Absorb Diode Rectifier ABD-10FLS

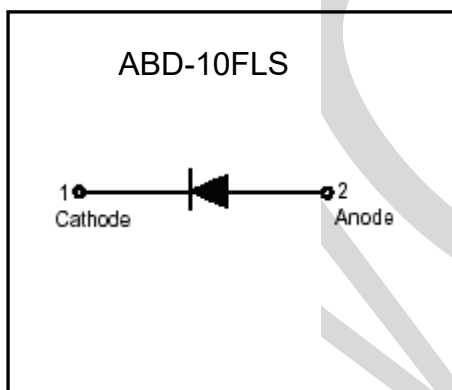
### Features

- High current capability
- Smoothly soft reverse recovery time (trr)
- Low profile surface mounted package in order to minimize board space
- Switching loss is small

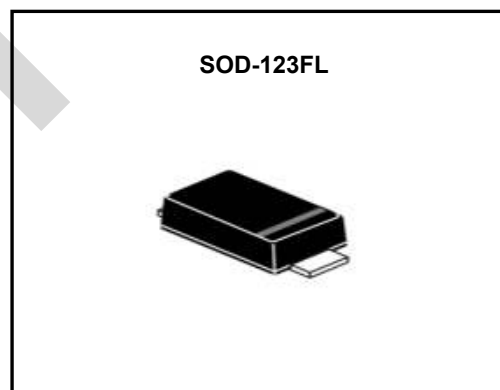
### Mechanical data

- Case : Molded plastic, JEDEC SOD-123FL.
- Epoxy : UL94-V0 rated flame retardant
- Terminals : Plated terminals, solderable per MIL-STD-202 method 208
- Polarity : Indicated by cathode band
- Mounting position : Any
- Weight : approx. 0.017 gram

### Symbol



### Outline



### Ordering Information

Device	Package	Shipping
ABD-10FLS	SOD-123FL	10 000 pcs / tape & reel

## Characteristics (T<sub>A</sub>=25°C, unless otherwise noted)

Parameters	Conditions	Symbol	ABD-10FL	Units
Repetitive peak reverse voltage		V <sub>RRM</sub>	800	V
RMS voltage		V <sub>RMS</sub>	560	V
Continuous reverse voltage		V <sub>R</sub>	800	V
Forward rectified current	Single phase half wave, 60Hz @T <sub>J</sub> =25°C	I <sub>F(AV)</sub>	1	A
Repetitive Peak Forward Current	Single phase half wave, 60Hz @T <sub>J</sub> =25°C	I <sub>FRM</sub>	1.5	A
Forward surge current	8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I <sub>FSM</sub>	20	A
Maximum reverse recovery time	I <sub>F</sub> =1A, dI <sub>F</sub> /dt=100A/μs	trr	2500	ns
Storage temperature range		T <sub>stg</sub>	-55~+150	°C
Operating junction temperature range		T <sub>j</sub>	-55~+150	°C
Forward Voltage	I <sub>F</sub> =1A	V <sub>F 1</sub>	1.1	V
Reverse Leakage Current	V <sub>R</sub> =560V	I <sub>R</sub>	5	uA
	V <sub>R</sub> =560V, T <sub>A</sub> =125°C	I <sub>R</sub>	50	uA
Junction Capacitance	V <sub>R</sub> =1V, f=1MHz	C <sub>J</sub>	11.6	pF

## Thermal Data

Parameter	Symbol	Value	Unit
Typical thermal resistance per diode	R <sub>θJC</sub>	50	°C/W

Note: When mounted on FR-4 PCB with area measuring 10×10 mm

## Typical Characteristics

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

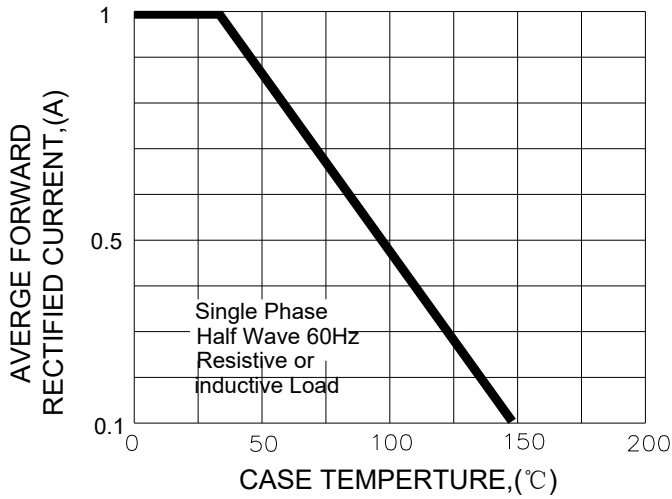


FIG.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

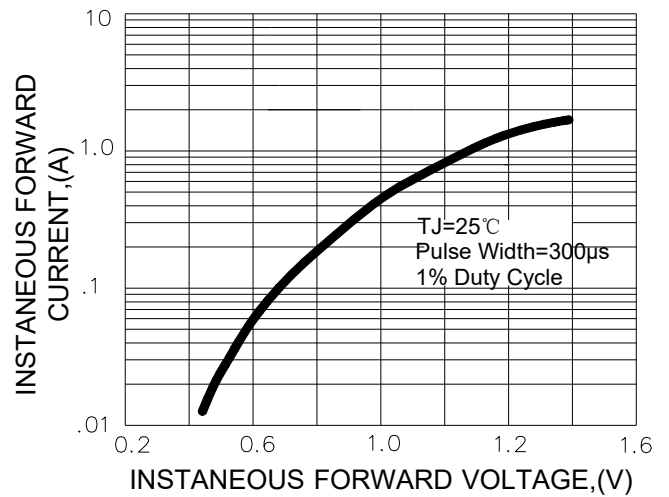


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

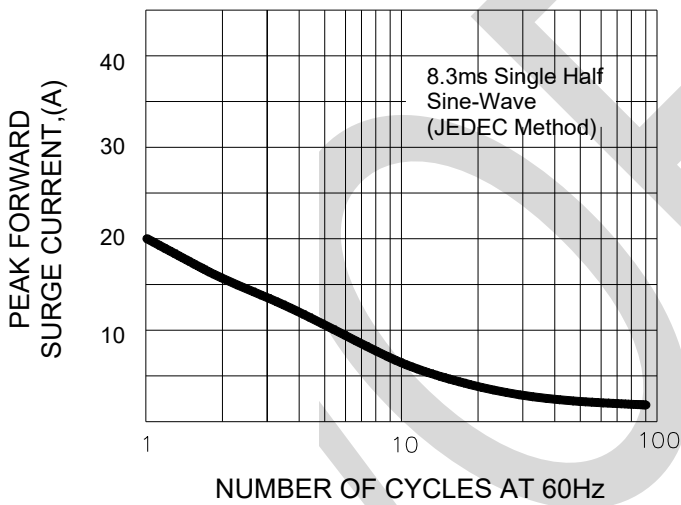
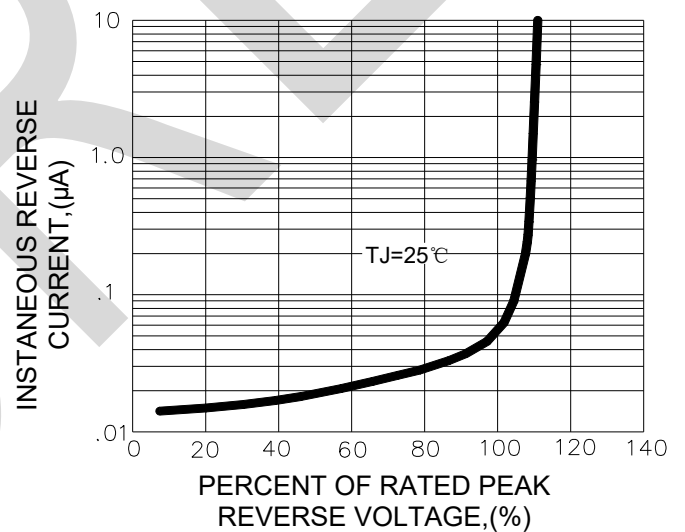
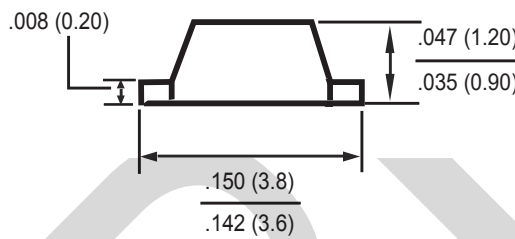
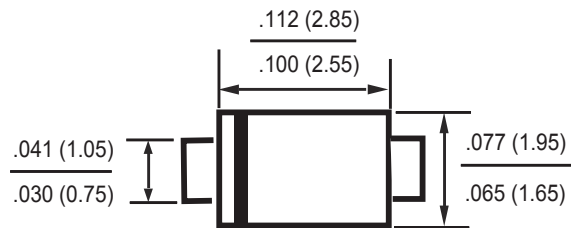


FIG.4-TYPICAL REVERSE CHARACTERISTICS



## PACKAGE OUTLINE

### SOD-123FL



Dimensions in inches and (millimeters)