

Absorb Diode Rectifier

ABD-10FL

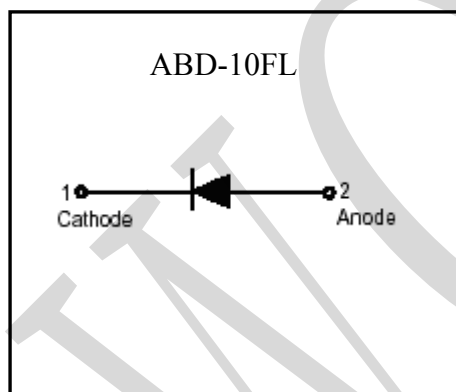
Features

- 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-10FL	SOD-123FL	10 000 pcs / tape & reel

Characteristics (T_A=25°C, unless otherwise noted)

Parameters	Conditions	Symbol	ABD-10FL	Units
Repetitive peak reverse voltage		V _{RRM}	800	V
RMS voltage		V _{RMS}	560	V
Continuous reverse voltage		V _R	800	V
Forward rectified current	Single phase half wave, 60Hz @T _J =25°C	I _{F(AV)}	1	A
Repetitive Peak Forward Current	Single phase half wave, 60Hz @T _J =25°C	I _{FRM}	1.5	A
Forward surge current	8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I _{FSM}	10	A
Maximum reverse recovery time	I _F =1A, dI _F /dt=100A/μs	t _{rr}	MAX 3000	ns
Storage temperature range		T _{stg}	-55~+150	°C
Operating junction temperature range		T _j	-55~+150	°C
Forward Voltage	I _F =100mA	V _{F 1}	1.4	V
	I _F =1A	V _{F 2}	1.7	
Reverse Leakage Current	V _R =560V	I _R	5	uA
	V _R =560V, T _A =125°C	I _R	50	uA
Junction Capacitance	V _R =1V, f=1MHz	C _J	11.6	pF

Thermal Data

Parameter	Symbol	Value	Unit
Typical thermal resistance per diode	R _{θJC}	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

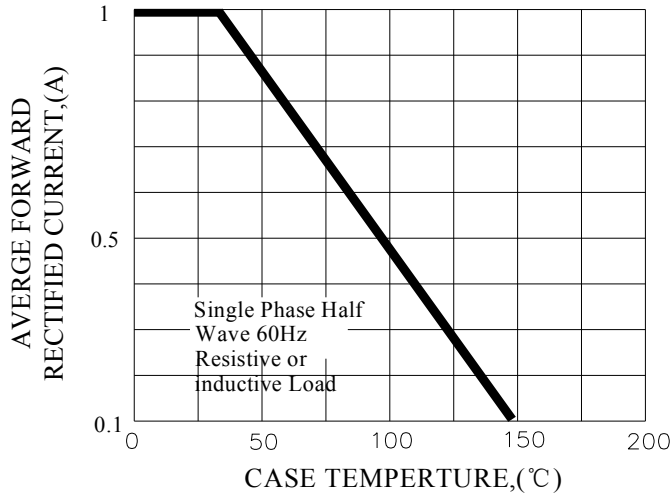


FIG.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

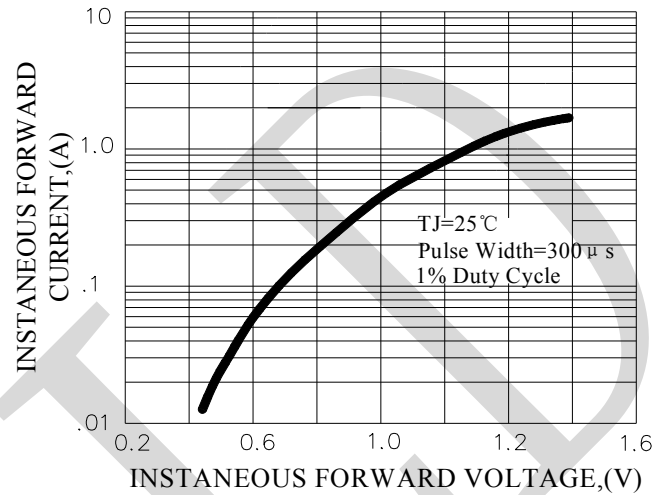


FIG.3-MAXIMUN NON-REPETITIVE FORWARD SURGE CURRENT

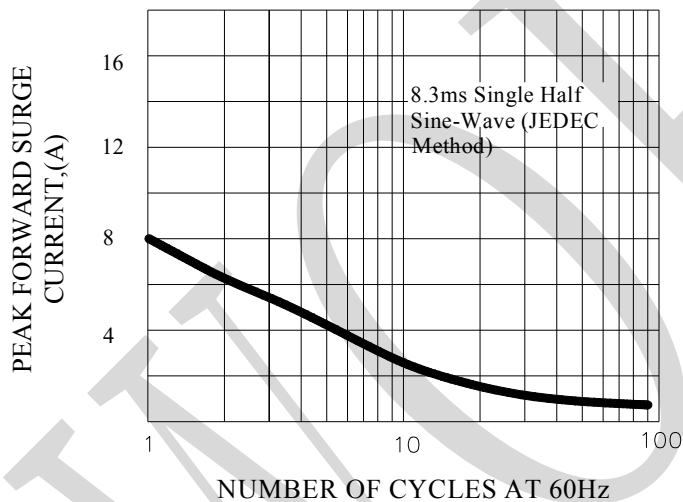
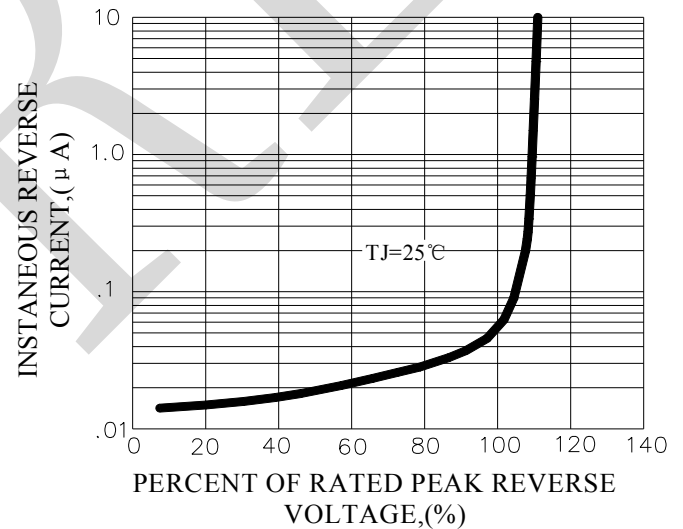
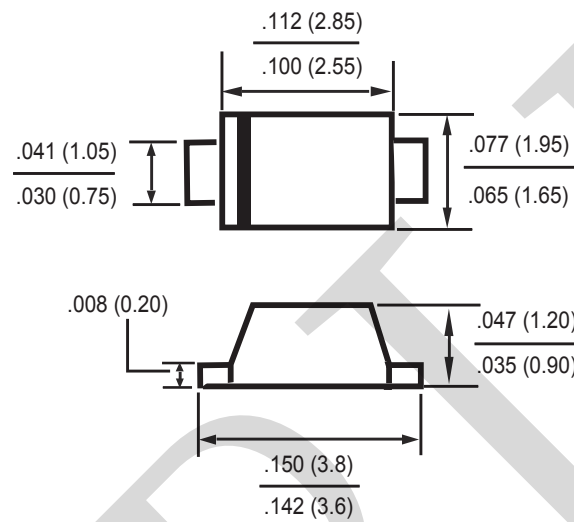


FIG.4-TYPICAL REVERSE CHARACTERISTICS



PACKAGE OUTLINE

SOD-123FL



Dimensions in inches and (millimeters)