

Micro Commercial Components

Micro Commercial Components 20736 Marilla Street Chatsworth CA 91311

Phone: (818) 701-4933 Fax: (818) 701-4939

ESDB101 THRU ESDB103

Features

- Surface Mount Package
- Glass Passivated Diode Construction
- Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0
- UL Recognized File # E165989

1 Amp Single Phase Fast Recovery Bridge Rectifier 50 to 200 Volts

Maximum Ratings

Operating Temperature: -55°C to +150°C
Storage Temperature: -55°C to +150°C

1	1400	.			
	MCC	Device	Maximum	Maximum	Maximum
	Catalog	Marking	Recurrent	RMS	DC
	Number		Peak Reverse	Voltage	Blocking
			Voltage	_	Voltage
	ESDB101	ESDB101	50V	35V	50V
	ESDB102	ESDB102	100V	70V	100V
	FSDB103	ESDB103	200V	140V	200V

SDB-1 B Notch in Case

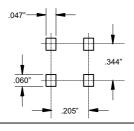
DIMENSIONS NOTE .316 8.05 8.51 .245 6.50 .255 6.20 D 10.4 .360 .410 9.40 .102 .125 2.60 3.2

Electrical Characteristics @ 25° C Unless Otherwise Specified

Average Forward Current	I _{F(AV)}	1A	TA = 40°C
Peak Forward Surge Current	I _{FSM}	50A	8.3ms, half sine
Maximum Instantaneous Forward Voltage	V_{F}	1.05V	IFM= 1.0A; T _A = 25°C
Maximum DC Reverse Current	I _R	10µA	Ta= 25°C
At Rated DC Blocking Voltage		1mA	Ta= 125°C
Typical Junction Capacitance	CJ	25pF	Measured at 1.0MHz, VR=4.0V
Rating For Fusing	l ² t	10A ² s	t<8.3ms
Max. Reverse Recovery Time Per Diode	Trr	50 ns	$I_F = 0.5 \text{ A}, I_R = 1.0 \text{ A},$ Irr = 0.25 A

Suggested Solder Pad Layout

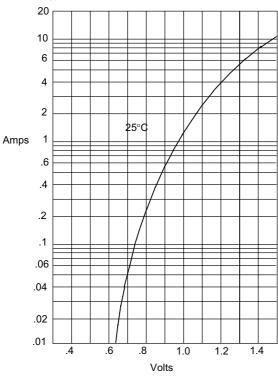
5.00





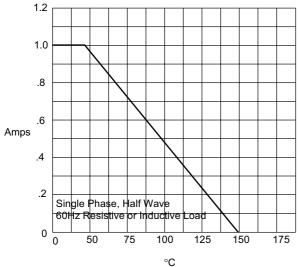
ESDB101 thru ESDB103

Figure 1
Typical Forward Characteristics



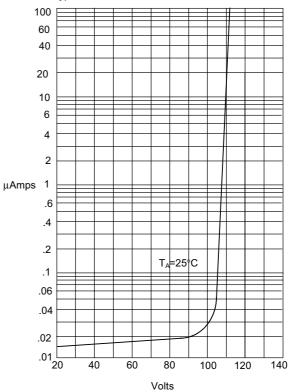
Instantaneous Forward Current - Amperesversus Instantaneous Forward Voltage - Volts

Figure 3
Forward Derating Curve



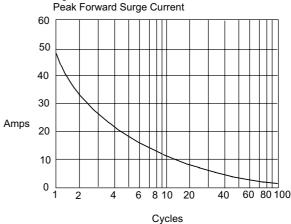
Micro Commercial Components





Instantaneous Reverse Leakage Current - MicroAmperesersus Percent Of Rated Peak Reverse Voltage - Volts

Figure 4
Peak Forward Surge Current



Peak Forward Surge Current - Amperesversus Number Of Cycles At 60Hz - Cycles



Micro Commercial Components

IMPORTANT NOTICE

Micro Commercial Components Corp . reserves the right to make changes without further notice to any product herein to make corrections, modifications, enhancements, improvements, or other changes. *Micro Commercial Components Corp* . does not assume any liability arising out of the application or use of any product described herein; neither does it convey any license under its patent rights ,nor the rights of others. The user of products in such applications shall assume all risks of such use and will agree to hold *Micro Commercial Components Corp* . and all the companies whose products are represented on our website, harmless against all damages.

APPLICATIONS DISCLAIMER

Products offer by *Micro Commercial Components Corp* . are not intended for use in Medical, Aerospace or Military Applications.