

## **Features**

- Halogen Free Available Upon Request By Adding Suffix "-HF"
- Low Forward Voltage Drop
- Lead Free Finish/Rohs Compliant ("P"Suffix Designates RoHS Compliant. See Ordering Information)
- Epoxy Meets UL 94 V-0 Flammability Rating
- Moisture Sensitivity Level 1

# **Maximum Ratings**

- Operating Junction Temperature Range: -55°C to +125°C
- Storage Temperature Range: -55°C to +150°C
- Thermal Resistance :667°C/W Junction to Ambient

Parameter	Symbol	Rating	Units
Peak Repetitive Reverse Voltage	V <sub>RRM</sub>	40	Vdc
Working Peak Reverse Voltage	V <sub>RWM</sub>	40	Vdc
RMS Reverse Voltage	V <sub>R(RMS)</sub>	28	Vdc
Average Rectified Output Current	Io	1.0	Adc
Peak Forward Surge Current @t<8.3ms	I <sub>FSM</sub>	5.0	Adc
Power Dissipation	P <sub>d</sub>	150	mW

# Electrical Characteristics @ 25°C Unless Otherwise Specified

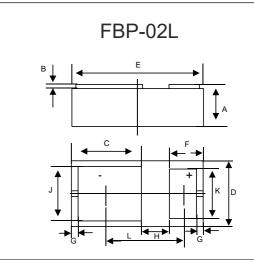
Parameter	Symbol	Min	Тур	Max	Units
Reverse Breakdown Voltage (I <sub>R</sub> =10μA)	V <sub>(BR)</sub>	40			Vdc
Forward Voltage					
(I <sub>F</sub> =0.5Adc)	V <sub>F</sub>		0.47		
(I <sub>F</sub> =0.7Adc)				0.55	Vdc
Reverse Current	_				
(V <sub>R</sub> =40Vdc)	I <sub>R</sub>			50	μAdc
Diode Capacitance					
(V <sub>R</sub> =1Vdc, f=1MHz,T <sub>J</sub> =25°C)	C <sub>D</sub>		50		рF
(V <sub>R</sub> =10Vdc, f=1MHz,T <sub>J</sub> =25°C)	- 0		20		Pi
Reverse Recovery Time	t <sub>rr</sub>		15		ns
$(I_F=I_R=10\text{mAdc}, R_L=100, I_{R(MEAS)}=1\text{mA})$	rr rr		13		113

Device Marking: AD

## **Internal Structure:**

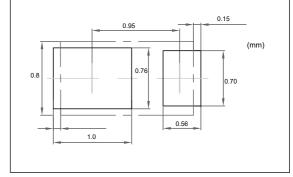


# 1.0 A Schottky Barrier Rectifier 40 Volts



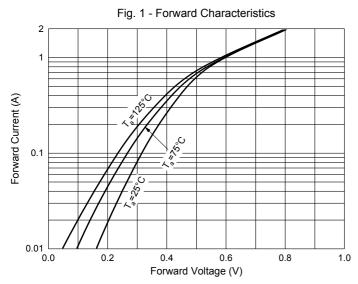
DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	NOIL
Α	0.018	0.022	0.45	0.55	
В	0.000	0.004	0.01	0.09	
С	0.033	REF.	0.850REF.		
D	0.030	0.033	0.75	0.85	
Е	0.061	0.065	1.55	1.65	
F	0.016	REF.	0.410 REF.		
G	0.003	REF.	0.080	REF.	
Н	0.013 REF.		0.340 REF.		
J	0.024	0.030	0.60	0.76	
K	0.020	0.027	0.52	0.68	
L	0.035	0.039	0.90	1.00	

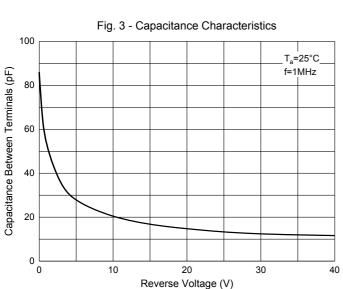
## **Suggested Solder Pad Layout**

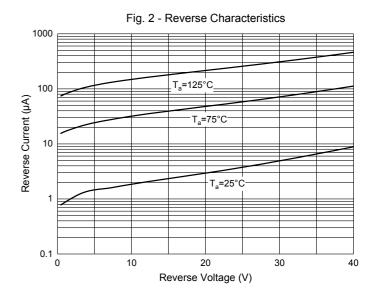


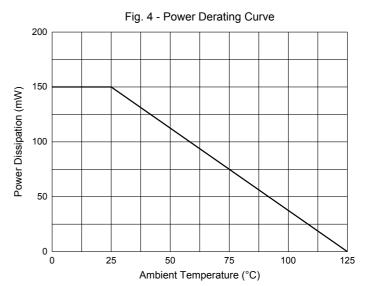


# **Curve Characteristics**











# **Ordering Information**

Device	Packing
Part Number-TP	Tape&Reel:10Kpcs/Reel

Note: Adding "-HF" Suffix For Halogen Free, eg. Part Number-TP-HF

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