

## Features

- Protects From Line to  $V_{\text{CC}}$  and Line to Ground
- Epoxy Meets UL 94 V-0 Flammability Rating
- Moisure Sensitivity Level 1
- Lead Free Finish/RoHS Compliant ("P" Suffix Designates RoHS Compliant. See Ordering Information)
- Low Forward Voltage and Reverse Recovery Characteristics
- Halogen Free. "Green" Device (Note 1)

## **Maximum Ratings**

- Operating Junction Temperature Range: -55°C to +125°C
- Storage Temperature Range: -55°C to +150°C
- Thermal Resistance: 430°C/W Junction to Ambient

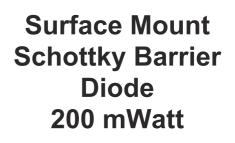
MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum DC Blocking Voltage
BAS40L2	43	40V	40V

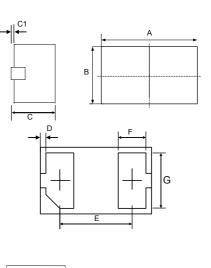
### Electrical Characteristics @ 25°C Unless Otherwise Specified

Forward Continuous Current	I <sub>F</sub>	200mA	
Peak Forward Surge Current	I <sub>FSM</sub>	600mA	(t<1s)
Power Dissipation	P <sub>D</sub>	200mW	
Reverse Breakdown Voltage	V <sub>(BR)</sub>	40V	Ι <sub>R</sub> =10μΑ
Maximum Instantaneous Forward Voltage	V <sub>F</sub>	0.38V 1.0V	I <sub>F</sub> =1mA* I <sub>F</sub> =40mA*
Leakage Current	I <sub>R</sub>	10nA(Typ) 0.2µA(Max)	V <sub>R</sub> =30V*
Typical Junction Capacitance	CJ	5pF	V <sub>R</sub> =0V, f=1MHZ
Maximum Reverse Recovery Time	t <sub>rr</sub>	5ns	$I_R = I_F = 10 \text{mA}$ $I_{RR} = 0.1 \text{x} I_R$ $R_L = 100 \Omega$

\*Pulse Test tp < 300µs

Note: 1. Halogen free "Green" products are defined as those which contain <900ppm bromine, <900ppm chlorine (<1500ppm total Br + Cl) and <1000ppm antimony compounds.





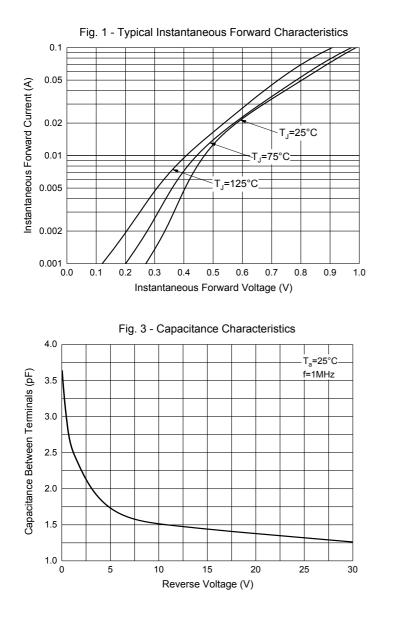
DFN1006-2L



DIMENSIONS							
DIM	INCHES		MM		NOTE		
	MIN	MAX	MIN	MAX	NOTE		
Α	0.037	0.041	0.95	1.05			
В	0.022	0.026	0.55	0.65			
С	0.016	0.020	0.40	0.50			
C1		0.002		0.05			
D	0.001	0.003	0.02	0.08			
Е	0.026BSC		0.65BSC				
F	0.008	0.012	0.20	0.30			
G	0.018	0.022	0.45	0.55			



# **Curve Characteristics**



100 Instantaneous Reverse Leakage Current (µA) T<sub>J</sub>=125°C 10 1 ≣TJ=75°C 0.1 TJ=25°C 0.01 0.001 20 40 60 80 100 Percent of Rated Peak Reverse Voltage (%) Fig. 4 - Power Derating Curve 250 200 Power Dissipation (mW) 150 100 50 0 L 0 25 50 75 100 125

Ambient Temperature (°C)

Fig. 2 - Typical Reverse Leakage Characteristics

#### Rev.3-3-12012020



# **Ordering Information**

Device	Packing	
Part Number-TP	Tape&Reel10Kpcs/Reel	

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