



Micro Commercial Corp.  
21201 Itasca St.  
Chatsworth, CA 91311  
Phone: (818) 701-4933  
Fax: (818) 701-4939

# MC420

## Features

- Low Turn-on Voltage
- Fast Switching
- PN Junction Guard Ring for Transient and ESD Protection

## 0.1 Amp Surface Mount Schottky Barrier Diode 40 Volts

## Mechanical Data

- Case :SOT-346,Molded Plastic
- Terminals :Solderable per MIL-STD-202,Method 208
- Polarity :See Diagrams Below
- Weight :0.008 grams (approx)
- Mountion Position :Any

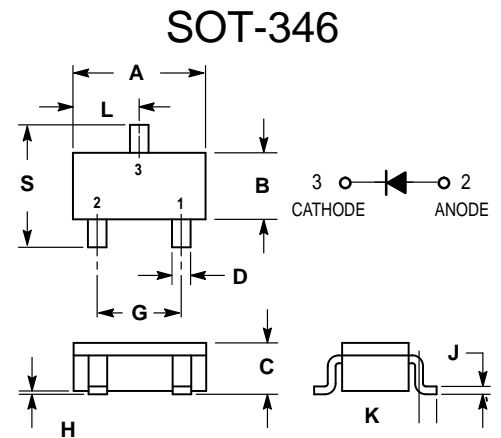
## Maximum Ratings

- Operating Temperature: -25°C to +125°C
- Storage Temperature: -40°C to +125°C

MCC Catalog Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
MC420	D3B	40V	28V	40V

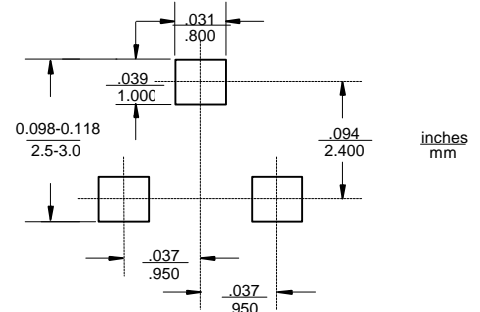
## Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	0.1A	$T_A = 25^\circ\text{C}$
Peak Forward Surge Current	$I_{FSM}$	1.0A	8.3ms, half sine
Maximum Forward Voltage Drop Per Element	$V_F$	0.45V	$I_{FM} = 10\text{mA}$ $T_A = 25^\circ\text{C}$
Maximum DC Reverse Current At Rated DC Blocking Voltage	$I_R$	1 $\mu\text{A}$	$T_A = 25^\circ\text{C}$ $V_R=10\text{V}$



DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.106	.122	2.70	3.10	
B	.051	.067	1.30	1.70	
C	.039	.051	1.00	1.30	
D	.014	.020	0.35	0.50	
G	.067	.091	1.70	2.30	
H	.000	.004	0.00	0.10	
J	.004	.010	0.10	0.26	
K	.008	.024	0.20	0.60	
L	.049	.065	1.25	1.65	
S	.089	.118	2.25	3.00	

## Suggested Solder Pad Layout



# MC420

## RATING AND CHARACTERISTIC CURVES

FIG.1-TYPICAL FORWARD CHARACTERISTICS

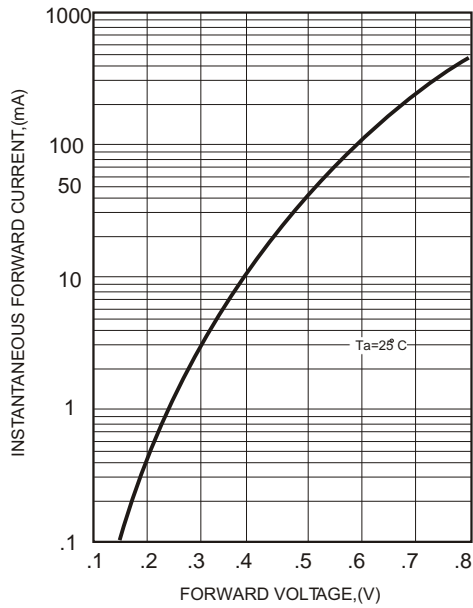


FIG.2-TYPICAL FORWARD CURRENT DERATING CURVE

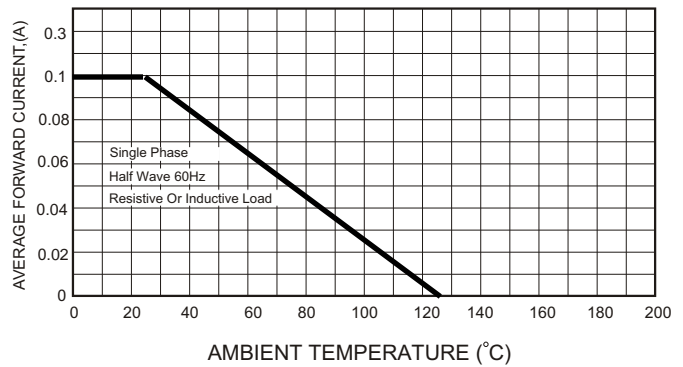


FIG.3 - TYPICAL REVERSE CHARACTERISTICS

