

**M·C·C·**

Micro Commercial Components



Micro Commercial Components  
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## Features

- Halogen free available upon request by adding suffix "-HF"
- Very Low Forward Voltage Drop.
- Guard Ring Protected
- Untral Small Surface Mount Package
- 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

## Mechanical Data

- Marking: L61
- Weight: 0.008 grams (approx.)

## Maximum Ratings

Symbol	Rating	Rating	Unit
$V_R$	Continuous Reverse Voltage	40	V
$V_{R(\text{RMS})}$	RMS Reverse Voltage	28	V
$I_O$	Average Rectified Current <sup>(1)</sup>	0.50	A
$I_{FSM}$	Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load(JEDEC Method)	2.0	A
$P_D$	Power Dissipation <sup>(1)</sup>	350	mW
$R_{JA}$	Thermal Resistance Junction to Ambient Air <sup>(1)</sup>	286	$^{\circ}\text{C}/\text{W}$
$T_J$	Junction Temperature	125	$^{\circ}\text{C}$
$T_{STG}$	Storage Temperature	-55 to +150	$^{\circ}\text{C}$

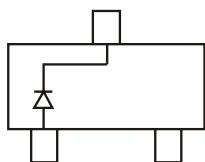
## Electrical Characteristics @ 25°C Unless Otherwise Specified

Symbol	Parameter	Min	Typ	Max	Units
$V_F$	Forward Voltage ( $I_F=500\text{mA}_\text{dc}$ ) <sup>(Note 1)</sup>	---	---	0.55	V
$I_R$	Reverse Current <sup>(Note 2)</sup> ( $V_R=35\text{Vdc}$ )	---	---	100	$\mu\text{A}$
$C_T$	Capacitance ( $V_R=0$ , $f=1.0\text{MHz}$ )	60	----	90	$\text{pF}$

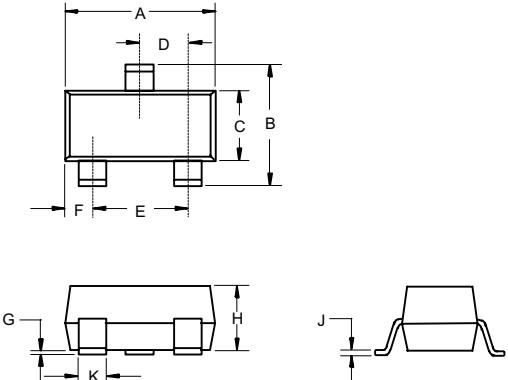
Notes: 1. Part mounted on FR-4 PC board with recommended pad layout

2. Short duration test pulse used to minimize self-heating effect.

## Internal Structure Schematic Diagram

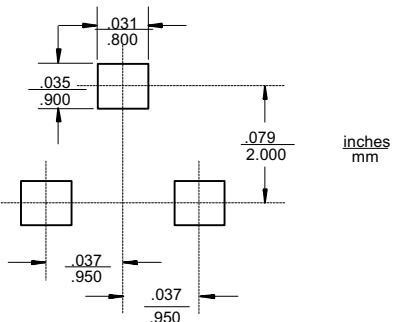
**BAT720**

**350mW**  
**Schottky Diodes**  
**40 Volts**

**SOT-23**

DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.110	.120	2.80	3.04	
B	.083	.104	2.10	2.64	
C	.047	.055	1.20	1.40	
D	.035	.041	.89	1.03	
E	.070	.081	1.78	2.05	
F	.018	.024	.45	.60	
G	.0005	.0039	.013	.100	
H	.035	.044	.89	1.12	
J	.003	.007	.085	.180	
K	.015	.020	.37	.51	

### Suggested Solder Pad Layout

**www.mccsemi.com**



TM

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## Ordering Information :

Device	Packing
Part Number-TP	Tape&Reel: 3Kpcs/Reel

Note : Adding "-HF" suffix for halogen free, eg. Part Number-TP-HF

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