

## CSP Low VF Schottky Barrier Diode

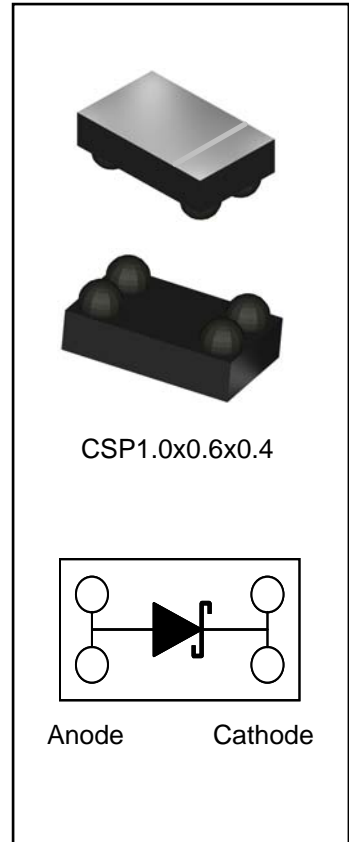
This schottky device has been optimized for very low forward voltage and low leakage current. It comes as a Chip Scale Package version (CSP), keeping the same form factor as 0402 (1.0x0.6x0.4mm), delivering a 500 mA, 30V solution, making it ideal for dc-dc application in portable devices, where the board space is a premium.

### SPECIFICATION FEATURES

- Very low VF - 460mV @ 100mA
- Maximum Leakage Current of 200 $\mu$ A @ 30V TA = 25°C
- Reverse Breakdown Voltage 30V
- Pb-Free and Halogen Free

### APPLICATIONS

- LCD Backlighting in Portable Devices
- Digital Cameras and Camcorders
- Mobile Phones and accessories
- Netbooks, Electronic Books
- GPS



### MAXIMUM RATINGS $T_j = 25^\circ\text{C}$ Unless otherwise noted

Rating	Symbol	Value	Units
Continuous Reverse Voltage	$V_R$	30	V
Continuous Forward Current	$I_F$	500	mA
Non-repetitive Peak Forward Surge Current 60Hz, Half wave	$I_{FSM}$	TBD	A
Total Power Dissipation, TA = 25°C	$P_d$	TBD	mW
Thermal Resistance Junction-to-Ambient (Note 1)	$R_{\theta JA}$	TBD	°C/W
Operating Junction Temperature Range	$T_j$	-55 to +125	°C
Storage Temperature Range	$T_{stg}$	-55 to +150	°C
Soldering Temperature, t max = 10 secs	$T_s$	TBD	°C

Note 1: Mounted in the min pad layout suggested, using FR-4 board, single sided. Operating to steady state.

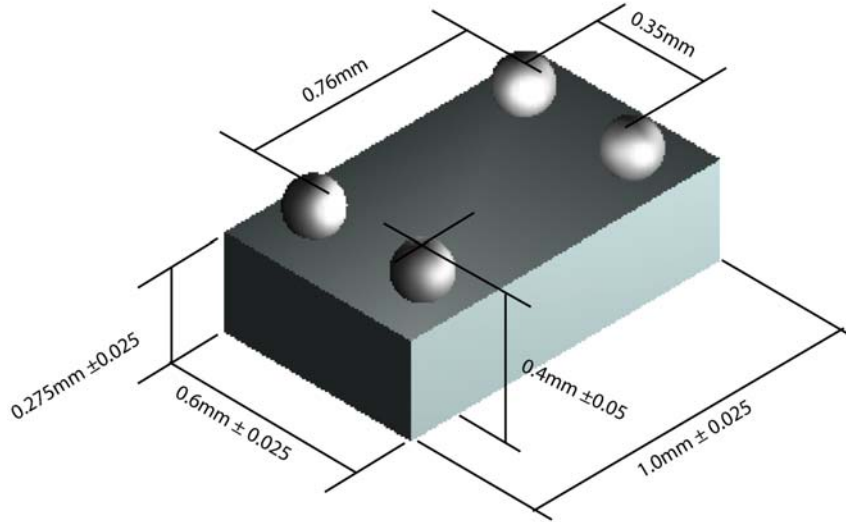
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**ELECTRICAL CHARACTERISTICS** T<sub>j</sub> = 25°C Unless otherwise noted

Parameter	Symbol	Conditions	Min	Typ	Max	Units
Forward Voltage	V <sub>F</sub>	I <sub>F</sub> = 10mA			0.37	V
		I <sub>F</sub> = 50mA				
		I <sub>F</sub> = 100mA			0.46	V
		I <sub>F</sub> = 500mA			0.62	V
Reverse Leakage Current	I <sub>R</sub>	V <sub>R</sub> = 30V			200	μA
Reverse Leakage Current at T <sub>j</sub> = 125°C	I <sub>R</sub>	V <sub>R</sub> = 10V			TBD	mA
		V <sub>R</sub> = 30V			TBD	mA
Junction Capacitance	C <sub>D</sub>	1 Vdc Bias, f = 1 MHz			TBD	pF

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CSP DIMENSIONS AND MINIMUM SUGGESTED PAD LAYOUT



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