



NXP low  $V_F$   
Schottky rectifier  
(single & dual)  
in DFN2020-3

## 1 and 2 A Schottky rectifiers in leadless medium-power package

These low  $V_F$  Schottky rectifiers, the first to be housed in the leadless medium-power DFN2020-3 (SOT1061) package, offer high forward current capability with low forward voltage. With integrated guard ring for stress protection, a footprint of only 2.0 x 2.0 mm, and a height of 0.62 mm, they offer great opportunities for miniaturization in high-performance applications.

### KEY FEATURES & BENEFITS

- ▶ Average forward current up to 2 A
- ▶ Reverse voltage: VR between 20 to 60 V
- ▶ Low forward voltage drop for low power consumption
- ▶ AEC-Q101 qualified
- ▶ Excellent electrical performance in a 2 x 2 mm package for smaller more compact PCB designs
- ▶ Exposed heat sink
- ▶ Single & dual c.c. configuration

### KEY APPLICATIONS



- ▶ Low voltage rectification
- ▶ High efficiency DC-to-DC conversion
- ▶ Switch Mode Power Supply (SMPS)
- ▶ Reverse polarity protection
- ▶ Battery chargers for mobile equipment
- ▶ LED backlight for mobile application



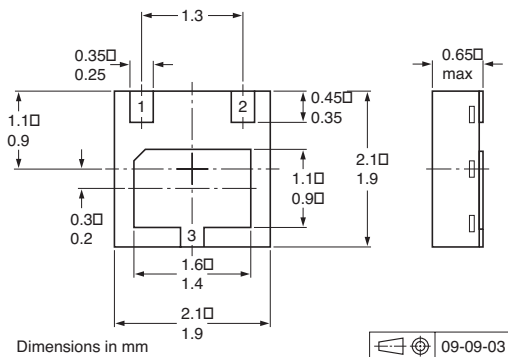
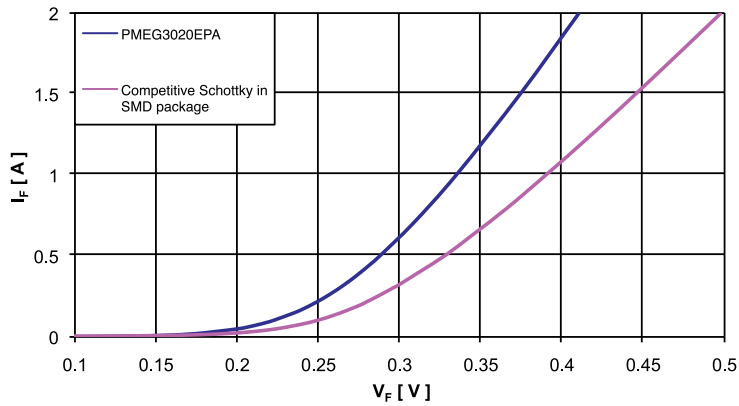
2.0 x 2.0 x 0.62 mm



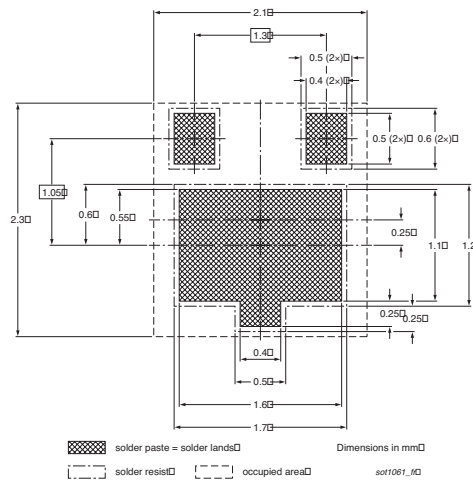
## Low V<sub>F</sub> (MEGA) Schottky family in DFN2020-3 (SOT1061)

I <sub>F</sub> max (A)	V <sub>R</sub> max (V)	V <sub>F</sub> max (mV) @ I <sub>F</sub> max	I <sub>R</sub> max (mA) @ V <sub>R</sub> max	Package	DFN2020-3 (SOT1061) Single	DFN2020-3 (SOT1061) Dual c.c.
						
					Size (mm)	2.0 x 2.0 x 0.62
P <sub>tot</sub> (W)	0.96					
1	20	375	1.9	Low V <sub>F</sub>	PMEG2010EPA	
	40	500	0.055	Low I <sub>R</sub>		PMEG4010CPA
	60	540	0.1	Low I <sub>R</sub>		PMEG6010CPA
2	20	420	1.9	Low V <sub>F</sub>	PMEG2020EPA	
	20	420	1	Low V <sub>F</sub>		PMEG2020CPA
	30	470	2.5	Low V <sub>F</sub>	PMEG3020EPA	
	30	440	2	Low V <sub>F</sub>		PMEG3020CPA
	40	535	0.1	Low I <sub>R</sub>	PMEG4020EPA	
	60	575	0.25	Low I <sub>R</sub>	PMEG6020EPA	

**Forward characteristics of competitive Schottky diodes**  
(30V, 2A types, typical curves @ 25 °C)



**Minimized outline**



**Reflow soldering footprint**

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