



→ **FEATURED PRODUCT**

## Good-Ark Semiconductor 10A-15A, 45V, Schottky Rectifier Series

In low profile, small foot print QFN5x6 package

Good-Ark Semiconductor introduces 10A and 15A, 45V Schottky Rectifiers in the low profile, small foot print QFN5x6 package, ideal for handheld devices, battery chargers and solar applications. Presenting a  $V_F$  of 0.33V @ $I_F=1A(25^\circ C)$  for the 10A version and a  $V_F$  of 0.30V @ $I_F=1A(25^\circ C)$  for the 15A version, this series is developed to meet the need of smart phones and tablet chargers that require better energy efficiency, lower thermal resistance and smaller and thinner in size. The devices are packaged in a QFN5x6 package, halogen free by design and meet the UL94 V-0 flammability rating.

### FEATURES

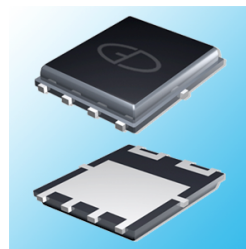
- Low forward voltage drop
- Low reverse current
- Low profile extra thin package (1.0mm)
- Low thermal resistance
- Halogen free by design

### BENEFITS

- Energy efficient
- Spacing saving
- Better thermal efficiency

### APPLICATIONS

- Battery chargers/Secondary rectification adapters
- Guarding for over voltage protection
- Low voltage, high frequency inverters
- Output rectification
- Polarity protection
- Freewheeling
- Solar panels



Power QFN 5X6  
6.10x5.20x1.00  
(L x W x H max value in mm)

### PRODUCT SERIES

Free samples available for immediate testing.  
Contact us at: 631-319-1858 or  
[inquiry@goodarksemi.com](mailto:inquiry@goodarksemi.com)

Maxim Ratings and Electrical Characteristics (Tc=25°C unless otherwise noted)											
MPN	V <sub>RRM</sub>	I <sub>F</sub>	T <sub>J</sub> , T <sub>stg</sub>	V <sub>F</sub>	@I <sub>F</sub>	V <sub>F</sub>		@I <sub>F</sub>	I <sub>s</sub>	R $\theta$ JC	R $\theta$ JA
	(V)	(A)	(°C)	TYP	(A)	TYP	MAX	(A)	T <sub>J</sub> =25°C	(°C/W)	(°C/W)
<b>MBRP1045</b>	45	10	-55 to +150	0.33	1	0.45	0.47	10	300 $\mu$ A	2.5	50
<b>SMBRP1545</b>	45	15	-55 to +150	0.30	1	0.43	0.47	15	500 $\mu$ A	2.5	50

### ALSO AVAILABLE IN OTHER PACKAGE TYPES:

- ✓ TO-220 ([MBR1545/MBRF1545](#))
- ✓ TO-263/ D2PAK ([MBRB1545](#))
- ✓ eSGC/TO-277B ([SGC1045S](#))
- ✓ Wafer/Bare Die

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