



SiC

Qrr

175°C

p

$\epsilon - \bar{a} - \bar{a}$

d

μ

Q C 0 z

1200V 120mΩ SiC MOSFET

Yangjie Technology recently launched the Jie Guan self-produced 1200V 120mΩ SiC MOSFET product, available in three packaging types: TO-247AB, TO-247-4L, and TO-263-7L. Designed for power electronics applications that demand ultimate energy efficiency and system compactness, it achieves a perfect balance between conduction loss and switching performance, specifically aimed at replacing traditional silicon-based super junction MOSFETs.

New Product Announcement

Leveraging the physical properties of SiC materials, this device features extremely low parasitic capacitance and very fast switching speeds. Its body diode has a very low reverse recovery charge (Qrr), which can significantly reduce switching losses, enabling power systems to easily achieve high-frequency designs and greatly enhance power density.

It supports junction temperatures of up to 175°C. Compared to silicon devices of the same specifications, it can significantly reduce heatsink size and even allow fanless cooling in some low power density designs, reducing the overall system cost.

Product Name	Package	Vds(V)	ID(A)	PTOT(W)	Rdson(mohm)typ	Rdson(mohm)max	Qg(nC)typ	Vth(V)typ	Tj()
YJD2120120B7YG3	TO-263-7L	1200	21	104	115	145	42	3.0	-55-175
YJD2120120NCFYG3	TO-247-4L		24	161					
YJD2120120NCTYG3	TO-247AB		24	161					

Main Board

UPS

Power Supply Unit