

1700V SiC MOSFET

SCT2H12NZ



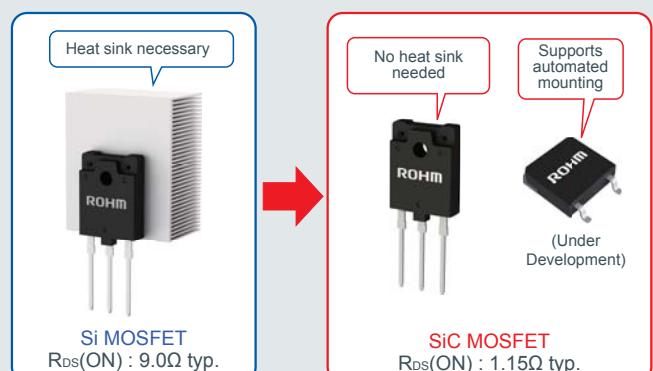
High-voltage SiC MOSFET ideal for use as an auxiliary power supply in industrial equipment

Product Outline

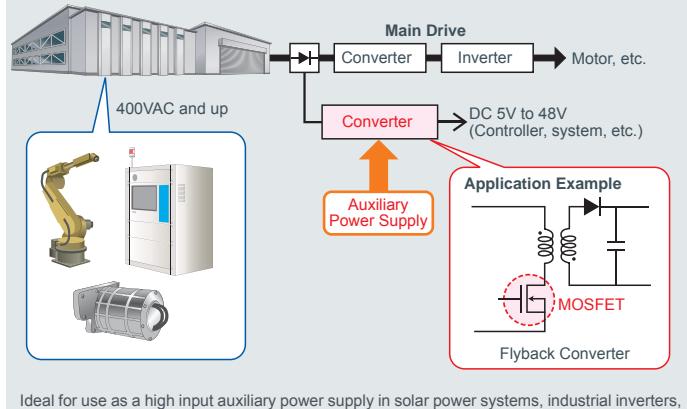
SiC devices are garnering increased attention in high voltage applications due to their superior characteristics and performance over silicon. For example, replacing high voltage (>1000V) silicon MOSFETs with high efficiency SiC MOSFETs in auxiliary power supply blocks in high power industrial equipment significantly reduces heat generation, eliminating the need for heat sinks. ROHM now offers the SCT2H12NZ 1700V-class SiC MOSFET along with an evaluation board that makes it easy to immediately verify operation.

■ No heat sink required*

SiC features much lower ON resistance than silicon, enabling high efficiency operation with less heat generation



■ Optimized for auxiliary power supplies



■ 2 package types offered (insertion/surface mount) - Evaluation board also available

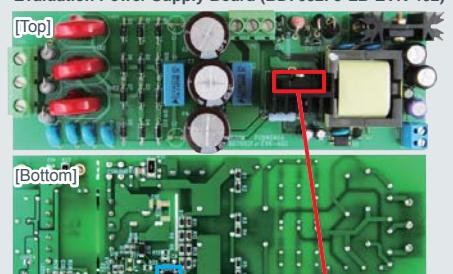
1700V SiC MOSFET Lineup

Part No.	Package	Polarity	V_{DSS}	I_D	P_D ($T_c=25^\circ C$)	$R_{DS(ON)}$ $V_{GS=18V}$	Q_g $V_{GS=18V}$
SCT2H12NZ	TO-3PFM	Nch	1700V	3.7A	35W	1.15Ω (typ.)	14nC (typ.)
★SCT2H12NY	TO-268-2L			4A	44W		
★SCT2750NY				5.9A	57W	0.75Ω (typ.)	17nC (typ.)

Evaluation power supply board available (Input: 3-phase 380VAC, Output: 24V/1A = 24W)
[Board also includes ROHM's BD7682FJ-LB AC/DC converter control IC for SiC MOSFET drive]

★ Under development

Evaluation Power Supply Board (BD7682FJ-LB-EVK-402)



AC/DC Converter Control IC
for SiC MOSFET Drive
(BD7682FJ-LB)



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