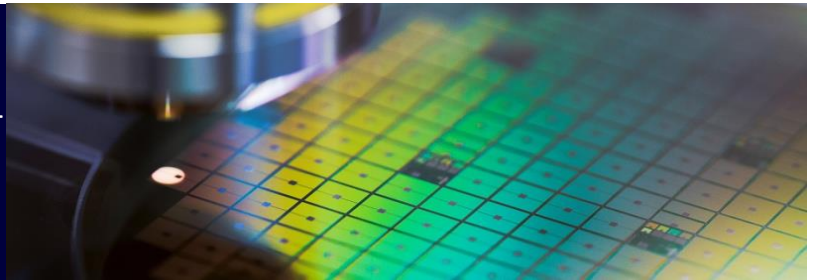


Silicon Carbide

Power modules

Superior performance for high power, high frequency applications needing best-in-class power density.



Available at
DigiKey

DigiKey

	Part Number	Voltage Rating	Current /Switch T _C =25 °C	R _{DS(on)} @25 °C	Thermal Resistance* R _{th(j-c)}	Max Junction Temp	Inductance
Half-Bridge							
	GE12047CCA3	1200 V	475 A	3.1 mΩ	0.1 K/W	175 °C	6 nH
	GE17042CCA3	1700 V	425 A	3.8 mΩ			
	GE12090CDA3	1200 V	875 A	1.6 mΩ	0.06 K/W	175 °C	10 nH
	GE17080CDA3	1700 V	765 A	1.9 mΩ			
	GE12160CEA3	1200 V	1425 A	1.0 mΩ	0.03 K/W	175 °C	3 nH
	GE17140CEA3	1700 V	1275 A	1.2 mΩ			
Dual / 2-Switch							
	GE12047BCA3	1200 V	475 A	3.1 mΩ	0.1 K/W	175 °C	1 nH (per switch)
	GE17042BCA3	1700 V	425 A	3.8 mΩ			
6-Switch							
	GE12050IEA3	1200 V	6 x 475 A	3.1 mΩ	0.1 K/W	175 °C	4 nH (per switch)
	GE17045IEA3	1700 V	6 x 425 A	4.8 mΩ			
6-Pack							
	GE12050EEA3	1200 V	3 x 475 A	3.1 mΩ	0.1 K/W	175 °C	4 nH
	GE17045EEA3	1700 V	3 x 425 A	3.8 mΩ			

* All current ratings are for standard AlSiC baseplates. Copper baseplates, available, yield 10% higher current rating

For more information, please contact: SiC.Products@ge.com

LI/PB_SiC_PM_03/24_REV1



Features

- High voltage, low $R_{DS(on)}$
- GE SiC MOSFET devices AEC-Q101 qualified at 200 °C
- Power Overlay wire bondless technology
- Direct RTD temperature sensor

Benefits

- Lowest parasitic inductance (1-10 nH)
- Higher switching frequency
- Highly accurate temperature measurement (within 1 °C)
- Improved thermal dissipation

Applications

- Traction DC-AC inverter
- AC-DC, DC-DC converter
- Solid state circuit breaker
- Power distribution

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Warning

This product is not authorized for use (1) in life support systems or (2) for applications implanted into the human body, without the express written approval of General Electric Company.

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