

POWER MODULES

Microsemi combines a formidable array of technologies in semiconductors, packaging, and automated manufacturing to produce wide range of high quality modules optimized for:

- Reliability
- Efficiency and electrical performance
- Low cost
- Space savings
- Reduced assembly time



The readily available standard module product line spans a wide selection of circuit topologies, semiconductors including silicon carbide, voltage and current ratings, and packages. If you need even more flexibility or intellectual property protection, Microsemi can often customize a standard power module with no setup cost and with a short lead time. Unique requirements can be met with Application Specific Power Modules (ASPM®).

In addition to industrial, UPS, SMPS, and motor drive applications, Microsemi serves Hi-Rel applications. A wide selection of construction materials enables Microsemi to manufacture with short lead times modules that feature:

- Extended temperature range: -60°C to +200°C
- Reduced size and weight
- Extended reliability
- Hi-Rel testing and screening options

Microsemi's experience and expertise in power electronic conversion brings the most effective technical support for your new development. Here is how we can help with your application:

- Isolated gate driver & supply
- Short circuit protection
- Snubbers
- Temperature & current sensing
- Mix & match semiconductors
- Parameter binning

Power Module Part Numbering System

APT	G = IGBT module	Speed	Current	Circuit	Voltage	Suffix
L Integrated	S Low Loss IGBT F Fast IGBT U Ultra Fast IGBT T Trench Gate IGBT	X 1	A Phase Leg H Full Bridge U Single Switch X 3 Phase Inverter DH Asymmetric Bridge DA Boost Chopper SK Buck Chopper DDA Double Boost Chopper DSK Double Buck Chopper DU Dual Common Source TA Triple Phase Leg TDU Triple Dual Common Source	/ 10	A AIN substrate B Rectif Bridge & Brake Switch D Series Diode M AISiC Base Plate R Rectifier Bridge T NTC W Clamping freewheeling diode only	
APT G F 300 U 120 DA						3 For SP3 package 6 For SP6 if redundancy with SP4 P/N P SP6 with solderable pins D1 34mm package D3 62mm package D4 62mm package E2 Econo type package E3 Econo type package P2 Econo type package P3 Econo type package

APT	M = MOSFET module C = CoolMOS™ module	Voltage	Circuit	Rdson	Suffix
L Integrated	/ 10	A Phase Leg H Full Bridge U Single Switch X 3 Phase Inverter DH Asymmetric Bridge DA Boost Chopper SK Buck Chopper DDA Double Boost Chopper DSK Double Buck Chopper DU Dual Common Source TA Triple Phase Leg TDU Triple Dual Common Source	if>100 : / 10 if<100 : M value	A AIN substrate B Rectif Bridge & Brake Switch C SiC diodes D Series Diode F FREDFET M AISiC Base plate R Rectif Bridge S Series and Parallel diodes T NTC	
APT C 60 A M18 SCT					3 For SP3 package 6 For SP6 if redundancy with SP4 P/N P SP6 with solderable pins D1 34mm package D3 62mm package D4 62mm package E2 Econo type package E3 Econo type package P2 Econo type package

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APT	D= Diode module	Type	Current	Circuit	Voltage	Suffix
	C SiC F FRED SK Schottky R Standard Rectifier	X 1	U Single H Bridge DH Dual Bridge AA Dual Common Anode KK Dual Common Cathode AK Dual Diodes	/ 10		
APT D F 400 AK 60						