



Power MOS 8™ is a new family of high speed, high voltage N-channel switch-mode power transistors with lower EMI characteristics and lower cost compared to previous generation devices. These new MOSFETs /FREDFETs have been optimized for both hard and soft switching in high frequency, high voltage applications rated above 500W. FREDFETs have a fast recovery body diode characteristic, providing high commutation dv/dt ruggedness and high reliability in ZVS circuits.

**FEATURES**

- Fast Switching
- Low Gate Charge
- Lower Cost
- Ultra Low Crss for Improved Noise Immunity
- Avalanche Energy Rated
- RoHS Compliant
- Low EMI

**TYPICAL APPLICATIONS**

- PFC and other boost converter
- Buck converter
- Two switch forward (asymmetrical bridge)
- Single switch forward
- Flyback
- Inverters

B <sub>Vdss</sub> Volts	R <sub>DS(on)</sub> Ohms	I <sub>D</sub> (Cont) Amps	MOSFET Part Number	FREDFET Part Number	Package Style	Sample Date
1200	4.60	4.2		APT4F120K	TO-220	<i>Feb-07</i>
	4.00	4.6	APT4M120K		TO-220	Jan-07
	2.90	6.6		APT7F120B	TO-247 or D <sup>3</sup>	Feb-07
	2.50	7.1	APT7M120B		TO-247 or D <sup>3</sup>	Jan-07
	1.40	13		APT13F120B	TO-247 or D <sup>3</sup>	<i>Jan-07</i>
	1.20	14	APT14M120B		TO-247 or D <sup>3</sup>	<i>Jan-07</i>
	.80	22		APT22F120L	TO-264 or T-MAX®	<i>Jan-07</i>
	.68	24	APT24M120L		TO-264 or T-MAX®	Sep-06
	.65	26		APT26F120L	TO-264 or T-MAX®	<i>Mar-07</i>
	.65	17		APT17F120J	SOT-227	<i>Mar-07</i>
	.56	28	APT28M120L		TO-264 or T-MAX®	<i>Mar-07</i>
	.56	19	APT19M120J		SOT-227	<i>Mar-07</i>
	.35	32		APT32F120J	SOT-227	<i>Jan-07</i>
.30	34	APT34M120J		SOT-227	Nov-06	
1000	2.90	5.4		APT5F100K	TO-220	Jan-07
	2.50	5.8	APT6M100K		TO-220	Jan-07
	2.00	7.3		APT7F100B	TO-247 or D <sup>3</sup>	Jan-07
	1.80	7.7	APT8M100B		TO-247 or D <sup>3</sup>	Jan-07
	1.70	8.7		APT9F100B	TO-247 & D <sup>3</sup>	Jan-07
	1.50	9.3	APT9M100B		TO-247 or D <sup>3</sup>	Jan-07
	1.00	14		APT14F100B	TO-247 or D <sup>3</sup>	Jan-07
	0.90	14	APT14M100B		TO-247 or D <sup>3</sup>	Jan-07
	0.80	17		APT17F100B	TO-247 or D <sup>3</sup>	Dec-06
	0.70	18	APT18M100B		TO-247 or D <sup>3</sup>	<i>Jan-07</i>
	0.46	29		APT29F100L	TO-264 or T-MAX®	Oct-06
	0.46	19		APT19F100J	SOT-227	Oct-06
	0.40	34		APT34F100L	TO-264 or T-MAX®	<i>Jan-07</i>
	0.40	31	APT31M100L		TO-264 or T-MAX®	Sep-06
	0.40	22		APT22F100J	SOT-227	<i>Jan-07</i>
	0.40	21	APT21M100J		SOT-227	Sep-06
	0.33	37	APT37M100L		TO-264 or TO-T-MAX®	<i>Jan-07</i>
	0.33	25	APT25M100J		SOT-227	<i>Jan-07</i>
0.21	41		APT41F100J	SOT-227	<i>Jan-07</i>	
0.18	45	APT45M100J		SOT-227	<i>Dec-06</i>	



$B_{V_{dss}}$ Volts	$R_{DS(on)}$ Ohms	$I_D$ (Cont) Amps	MOSFET Part Number	FREDFET Part Number	Package Style	Sample Date
800	1.70	7.1		APT7F80K	TO-220	Feb-07
	1.50	7.6	APT8M80K		TO-220	Feb-07
	1.00	11		APT11F80B	TO-247 or D <sup>3</sup>	Feb-07
	0.90	12	APT12M80B		TO-247 or D <sup>3</sup>	Feb-07
	0.65	17		APT17F80B	TO-247 or D <sup>3</sup>	<b>Mar-07</b>
	0.56	18	APT18M80B		TO-247 or D <sup>3</sup>	<b>Feb-07</b>
	0.50	22		APT22F80B	TO-247 or D <sup>3</sup>	Jan-07
	0.43	24	APT24M80B		TO-247 or D <sup>3</sup>	Jan-07
	0.28	38		APT38F80L	TO-264 or T-MAX®	<b>Jan-07</b>
	0.24	44		APT44F80L	TO-264 or T-MAX®	<b>Mar-07</b>
	0.24	41	APT41M80L		TO-264 or T-MAX®	<b>Dec-06</b>
	0.24	29		APT29F80J	SOT-227	<b>Feb-07</b>
	0.20	48	APT48M80L		TO-264 or T-MAX®	<b>Feb-07</b>
	0.20	32	APT32M80J		SOT-227	<b>Feb-07</b>
	0.13	53		APT53F80J	SOT-227	Dec-06
0.11	58	APT58M80J		SOT-227	Nov-06	
600	0.62	12		APT12F60K	TO-220	Feb-07
	0.48	15		APT15F60B	TO-247 or D <sup>3</sup>	<b>Feb-07</b>
	0.39	18		APT18F60B	TO-247 or D <sup>3</sup>	<b>Feb-07</b>
	0.31	23		APT23F60B	TO-247 or D <sup>3</sup>	<b>Mar-07</b>
	0.25	28		APT28F60B	TO-247 or D <sup>3</sup>	<b>Mar-07</b>
	0.21	34	APT34M60B	APT34F60B	TO-247 or D <sup>3</sup>	<b>Jan-07</b>
	0.16	43	APT43M60L		TO-264 or T-MAX®	Nov-06
	0.16	30	APT30M60J		SOT-227	Sep-06
	0.13	56	APT56M60L		TO-264 or T-MAX®	Nov-06
	0.13	39	APT39M60J		SOT-227	Nov-06
	0.10	66	APT66M60L		TO-264 or T-MAX®X	<b>Dec-06</b>
	0.10	47	APT47M60J		SOT-227	<b>Dec-06</b>
	0.06	80	APT80M60J		SOT-227	<b>Jan-07</b>
500	0.39	15		APT15F50K	TO-220	Jan-07
	0.30	20		APT20F50B	TO-247 or D <sup>3</sup>	Jan-07
	0.24	24		APT24F50B	TO-247 or D <sup>3</sup>	Jan-07
	0.19	30		APT30F50B	TO-247 or D <sup>3</sup>	<b>Jan-07</b>
	0.15	37		APT37F50B	TO-247 or D <sup>3</sup>	<b>Jan-07</b>
	0.14	42		APT42F50B	TO-247 or D <sup>3</sup>	<b>Jan-07</b>
	0.10	56	APT56M50L		TO-264 or T-MAX®	Nov-06
	0.10	38	APT38M50J		SOT-227	Nov-06
	0.075	75	APT75M50L		TO-264 or T-MAX®	<b>Dec-06</b>
	0.075	51	APT51M50J		SOT-227	<b>Dec-06</b>
	0.065	84	APT84M50L		TO-264 or T-MAX®	Dec-06
	0.065	58	APT58M50J		SOT-227	Dec-06
	0.038	100	APT100M50J		SOT-227	Dec-06