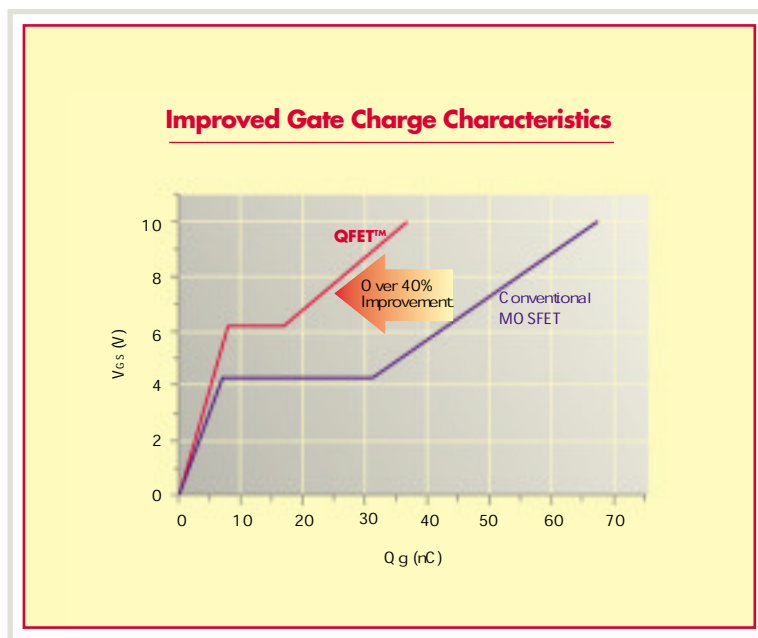


Fairchild Power MO SFETs QFET™ Line Card

Overview

Fairchild Semiconductor, a leading innovator in the design and manufacture of high-performance semiconductors, introduces QFET™, an advanced technology for power MOSFETs. QFET™

Fairchild's new stripe active cell process technology, QFET™, boosts efficiency in power system designs without increasing system cost. The new technology increases power density, reduces power loss and improves reliability. Quantifiable advances in system performance include greater switching speeds, cooler running temperatures, and increased ruggedness.



Applications include:

HD-TVs, Flat Panel Displays (PDP, TFT-LCD)
Desktop PCs and Peripherals
Industrial Ballasts and Compact Ballasts
Power Supplies for Telecommunication and Servers
DC-DC Modules for Telecommunication

DC-AC Applications (Inverter)
PFC Applications
Motor Control Applications
Professional Audio Amplifiers and Car Boosters




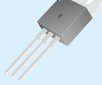

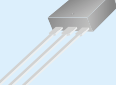
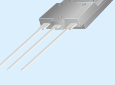
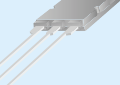
A cross the board. A round the world.

FAIRCHILD
SEMICONDUCTOR®

October, 2001

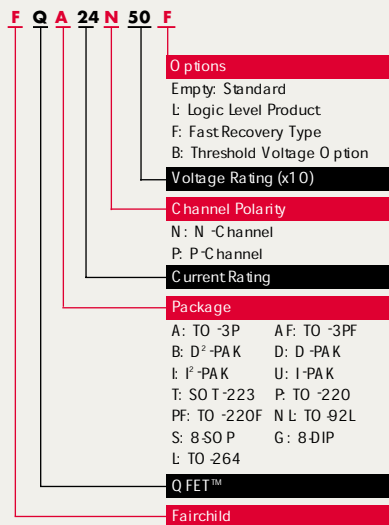
QFET™ Selection Guide : Through Hole Packages (continued)

500V ~ 900V, -500V ~ -60V

											
V_{DSS} (V)	$R_{DS(on)}$ max (Ω)	Q_g , typ (nC)	V_{GS} ¹⁾ (V)	TO-92L	I-PAK	I²-PAK	TO-220	TO-220F	TO-3P	TO-3PF	TO-264
500	9	4	10		FQ U1N 50		FQ P1N 50	FQ PF1N 50			
500	9	4	10	FQ N L1N 50B ³⁾	FQ U1N 50B ³⁾						
600	0.24	110	10						FQ A 24N 60		
600	0.38	70	10						FQ A 19N 60	FQ AF19N 60	
600	0.7	42	10			FQ I1 2N 60	FQ P1 2N 60	FQ PF1 2N 60	FQ A 12N 60	FQ AF1 2N 60	
600	1	29	10			FQ I7N 60	FQ P7N 60	FQ PF7N 60	FQ A 7N 60	FQ AF7N 60	
600	1.5	20	10			FQ I6N 60	FQ P6N 60	FQ PF6N 60			
600	2	16	10			FQ I5N 60	FQ P5N 60	FQ PF5N 60			
600	2.2	15	10			FQ I4N 60	FQ P4N 60	FQ PF4N 60			
600	3.6	10	10		FQ U 3N 60	FQ I3N 60	FQ P3N 60	FQ PF3N 60			
600	4.7	9	10		FQ U 2N 60	FQ I2N 60	FQ P2N 60	FQ PF2N 60			
600	11.5	5	10		FQ U1N 60	FQ I1N 60	FQ P1N 60	FQ PF1N 60			
700	0.56	70	10						FQ A 15N 70	FQ AF15N 70	
700	1.5	30	10			FQ I6N 70	FQ P6N 70	FQ PF6N 70	FQ A 6N 70	FQ AF6N 70	
800	0.75	68	10						FQ A 13N 80	FQ AF1 3N 80	
800	1.05	55	10						FQ A 10N 80	FQ AF1 0N 80	
800	1.2	44	10						FQ A 8N 80	FQ AF8N 80	
800	1.5	40	10			FQ I7N 80	FQ P7N 80	FQ PF7N 80	FQ A 7N 80	FQ AF7N 80	
800	1.95	31	10			FQ I6N 80	FQ P6N 80	FQ PF6N 80	FQ A 6N 80	FQ AF6N 80	
800	2.6	25	10			FQ I5N 80	FQ P5N 80	FQ PF5N 80			
800	3.6	19	10			FQ I4N 80	FQ P4N 80	FQ PF4N 80			
800	5	15	10			FQ I3N 80	FQ P3N 80	FQ PF3N 80			
800	6.3	12	10		FQ U 2N 80	FQ I2N 80	FQ P2N 80	FQ PF2N 80			
800	20	5.5	10		FQ U1N 80						
900	0.96	72	10						FQ A 11N 90	FQ AF11N 90	
900	1.3	55	10						FQ A 9N 90	FQ AF9N 90	
900	1.55	45	10						FQ A 7N 90	FQ AF7N 90	
900	1.8	40	10						FQ A 7N 90M		
900	1.9	40	10			FQ I6N 90	FQ P6N 90	FQ PF6N 90	FQ A 6N 90	FQ AF6N 90	
900	2.3	31	10			FQ I5N 90	FQ P5N 90	FQ PF5N 90	FQ A 5N 90	FQ AF5N 90	
900	3.1	24	10			FQ I4N 90	FQ P4N 90	FQ PF4N 90			
900	4.25	20	10			FQ I3N 90	FQ P3N 90	FQ PF3N 90			
900	5.8	15	10			FQ I2N A 90	FQ P2N A 90	FQ PF2N A 90			
900	7.2	12	10		FQ U 2N 90	FQ I2N 90	FQ P2N 90	FQ PF2N 90			
60	0.026	84	-10			FQ I47P06	FQ P47P06	FQ PF47P06	FQ A 47P06	FQ AF47P06	
60	0.7	33	-10			FQ I27P06	FQ P27P06	FQ PF27P06			
60	0.12	21	-10			FQ I17P06	FQ P17P06	FQ PF17P06			
60	0.135	21	-10		FQ U17P06						
60	0.175	13	-10			FQ I11P06	FQ P11P06	FQ PF11P06			
60	0.185	13	-10		FQ U11P06						
60	0.41	6.3	-10			FQ I7P06	FQ P7P06	FQ PF7P06			
60	0.45	6.3	-10		FQ U7P06						
-100	0.125	40	-10			FQ I22P10	FQ P22P10	FQ PF22P10	FQ A 22P10	FQ AF22P10	
-100	0.19	30	-10			FQ I17P10	FQ P17P10	FQ PF17P10	FQ A 17P10	FQ AF17P10	
-100	0.29	21	-10		FQ U12P10	FQ I12P10	FQ P12P10	FQ PF12P10			
-100	0.53	12	-10		FQ U8P10	FQ I8P10	FQ P8P10	FQ PF8P10			
-100	1.05	6.3	-10		FQ U5P10	FQ I5P10	FQ P5P10	FQ PF5P10			
-200	0.47	31	-10			FQ I12P20	FQ P12P20	FQ PF12P20	FQ A 12P20	FQ AF12P20	
-200	0.69	19	-10		FQ U7P20	FQ I7P20	FQ P7P20	FQ PF7P20			
-200	1.4	10	-10		FQ U5P20	FQ I5P20	FQ P5P20	FQ PF5P20			
-200	2.7	6	-10		FQ U3P20	FQ I3P20	FQ P3P20	FQ PF3P20			
-250	0.62	29	-10			FQ I9P25	FQ P9P25	FQ PF9P25	FQ A 9P25	FQ AF9P25	
250	1.1	21	-10		FQ U6P25	FQ I6P25	FQ P6P25	FQ PF6P25			
250	2.1	10	-10		FQ U4P25	FQ I4P25	FQ P4P25	FQ PF4P25			
-250	4	6.5	-10		FQ U2P25	FQ I2P25	FQ P2P25	FQ PF2P25			
400	3.1	18	-10		FQ U4P40	FQ I4P40	FQ P4P40	FQ PF4P40			
400	6.5	10	-10		FQ U2P40	FQ I2P40	FQ P2P40	FQ PF2P40			
-500	4.9	18	-10		FQ U3P50	FQ I3P50	FQ P3P50	FQ PF3P50			
-500	10.5	11	-10		FQ U1P50	FQ I1P50	FQ P1P50	FQ PF1P50			

Note 1) $\pm 10V$: Standard level, $\pm 5V$: Logic level, 3) VTH 3V

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