

Medium Output Power MOSFETs(2) SANYO

LD Series (Low Drive) VDSS:12V~200V (F.C.P: Flat Channel Process)

SANYO has realized low-threshold voltage by optimum design of impurity concentration of Si or Si surface by adopting the F.C.P. process

Ultra-low on-resistance has been achieved by the LSI-class precision process and the optimum design.

In addition to the conventional 4V-drive products, this series has included 2.5V-drive products, and is the ultra-low on-resistance low-voltage series which is the first SOP8 package MOSFET series.

In addition to the below SANYO has a wide variety of package of large signal power MOSFET series. See the tables on other pages.

Applications *Li ion battery, notebook PC, AV equipment, personal equipment etc.

Features *Low on-resistance, low-voltage drive. Available for surface mount.

Device marks are indicated in four-digit figures of the type Nos. for SOP8 and figures of the type Nos. for PCP5.

TSSOP8 device marking is an S followed by figures of its type No.

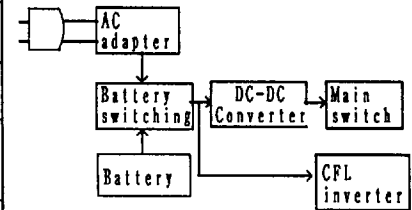
PD (Package: SOP8): Mounted on ceramic board (1200mm², 1000mm² X 0.8mm). For P-channel, "-" sign is omitted.

PD ♦ sign : Tc=25°C.

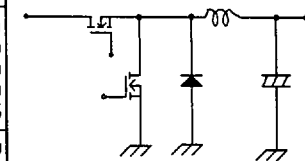
PD (Package: CPH3/6): Mounted on ceramic board (900mm² X 0.8mm).

Type No. (): Marking Features	Package	Absolute Maximum Ratings/Ta=25°C				Electrical Characteristics/Ta=25°C					
		V _{DSS}	V _{GSS}	I _D	P _D	V _{GS(off)}	y _{fs}	R _{DS(on)} (Ω)		C _{iss}	
		(V)	(V)	(A)	(W)	(V)	typ (S)	V _{GS} =4V typ/max	V _{GS} =10V typ/max	typ (pF)	
2SJ284(AM) 2SJ502(FM)	CP	±15 ±20	0.3 0.5	0.25 0.25	1 ~ 2 1 ~ 2.5	0.35 0.8	2.2/3.3 0.69/0.97	1.5/2.2 0.36/0.6	50 90		
2SK1847(KJ) 2SK2910(EK) 2SK2969(GK)		±15 ±20 ±10	0.5 0.8 0.8	0.25 0.25 0.25	1 ~ 2 1 ~ 2.4 0.4 ~ 1.3	0.7 1.6 0.5	0.75/1.1 0.35/0.48 0.28/0.37	0.5/0.75 0.23/0.3 -	50 90 90		
CPH3304(JD) CPH3404(KD)	CPH3	±20 ±24	1.6 2.2	1 1	1 ~ 2.5 1 ~ 2.4	1.5 2	400m/550m 230m/320m	240m/315m 115m/150m	160 125		
CPH6302(KB) CPH6402(KB)	CPH6	±20 ±24	3 4	1.6 1.6	1 ~ 2.5 1 ~ 2.4	3 4.3	190m/270m 110m/155m	110m/145m 55m/75m	300 240		
2SJ187(JA) 2SJ287(JD) 2SJ416(JJ) 2SJ561(JM) 2SJ563(JO)	PCP	±15 ±15 ±20 ±20 ±20	1 0.5 2 1.5 2	♦3.5 ♦3.5 ♦3.5 ♦3.5 ♦3.5	1 ~ 2 1 ~ 2 1 ~ 2.5 1 ~ 2.5 1 ~ 2.5	1 0.4 2 1.1 1.7	0.75/1.1 2.2/3.3 0.48/0.65 0.69/0.97 0.4/0.55	0.5/0.75 1.5/2.2 0.31/0.44 0.36/0.6 240m/315m	170 50 170 90 160		
2SK1467(KC) 2SK1724(KF) 2SK2437(KQ) 2SK3120(KT) 2SK3122(KW)		±15 ±15 ±20 ±20 ±24	2 1 2 2 3	♦3.5 ♦3.5 ♦3.5 ♦3.5 ♦3.5	1 ~ 2 1 ~ 2 1 ~ 2.5 1 ~ 2.4 1 ~ 2.4	2 1 2.4 1.8 2.5	0.3/0.45 0.75/1.1 0.2/0.26 0.35/0.48 0.23/0.32	0.2/0.3 0.5/0.75 0.13/0.18 0.23/0.3 115m/150m	170 50 170 90 125		
FTD1002 FTD2002 FTD2013 FTS1002 FTS1004 FTS2002 FTS2004	TSSOP8	±20 ±20 ±10 ±20 ±20 ±20 ±20	2 3 4.5 4 3 5 4	0.8 0.8 0.8 1.5 1.3 1.5 1.3	1 ~ 2.5 1 ~ 2.4 0.5 ~ 1.3 1 ~ 2.5 1 ~ 2.5 1 ~ 2.5 1 ~ 2.4	3.7 5.5 10 7.5 5 10 8	220m/310m 80m/110m 25m/35m 85m/120m 135m/190m 37m/50m 58m/78m	110m/140m 45m/60m - 42m/54m 65m/85m 24m/32m 36m/46m	400 330 1000 820 470 700 460		
2SJ421 2SJ469	SOP8	±20 ±25	5 5	2 2	1 ~ 2.5 1 ~ 2.5	10 8	65m/107m 100m/160m	45m/58m 55m/80m	1000 800		
2SK2442		±20	7	2	1 ~ 2.5	12	34m/48m	24m/29m	1000		
FSS102 Pch FSS104 Pch FSS106 Pch FSS108 Pch FSS202 Nch FSS204 Nch FSS206 Nch FSS208 Nch FSS210 Nch FSS212 Nch FSS214 Nch FSS216 Nch		±20 ±20 ±20 ±20 ±20 ±20 ±20 ±20 ±20 ±24 ±24 ±24	5 6 7 8 7 8 9 10 10 8 9 10	★1.8 ★2.1 2.1 2.1 ★1.8 ★2.1 2.1 2.1 2.1 ★1.8 ★2.1 2.1	1 ~ 2.5 1 ~ 2.5 1 ~ 2.5 1 ~ 2.5 1 ~ 2.4 1 ~ 2.4 1 ~ 2.5 1 ~ 2.4 1 ~ 2.4 1 ~ 2.4 1 ~ 2.4 1 ~ 2.4	8 9 10 13 12 16 14 24 12 13 14	85m/120m 62m/85m 47m/66m 35m/48m 37m/50m 27m/37m 20m/26m 15m/20m 42m/58m 30m/42m 20m/28m	42m/54m 30m/38m 23m/30m 17m/22m 25m/32m 18m/25m 14m/18m 9.5m/12.5m 21m/27m 15m/20m 11m/15m	820 1100 1500 2000 700 960 1600 1700 640 900 1200		
FW106 PchX2 FW113 PchX2 FW115 PchX2 FW203 NchX2 FW206 NchX2 FW213 NchX2 FW215 NchX2 FW306 Nch+Pch (pch) FW501 FSS202+ SB20-03P	SOP8	±25 ±20 ±20 ±20 ±25 ±20 ±20 ±25 ±20	3 5 3 5 5 7 5 4 7	P _r 1.7 ★1.7 P _r P _r P _r P _r P _r ★1.8 ★1.8 ★1.8	1 ~ 2.5 1 ~ 2.5 1 ~ 2.5 1 ~ 2.5 1 ~ 2.5 1 ~ 2.4 1 ~ 2.4 1 ~ 2.5 1 ~ 2.4 1 ~ 2.4 1 ~ 2.4	5 8 5 8 8 10 9 5 12	200m/320m 85m/120m 135m/190m 58m/78m 84m/120m 37m/50m 58m/78m 200m/320m 37m/52m	110m/160m 42m/53m 65m/85m 36m/46m 50m/65m 25m/32m 36m/46m 50m/65m 110m/160m 25m/32m	460 820 470 550 460 700 460 460 700 700		

Notebook Computer System Diagram

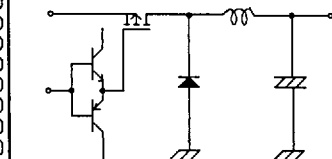


Synchronous rectifier type



DC-DC Converter Sample Application Circuits

Chopper type



Underlined type Nos. are before mass production.

(To be continued next page for VDSS 30V series)

In addition to the above, complex type packages such as PCP4/5(MOSFET X 2, MOSFET + SBD) are available. See the tables.

Precaution :Take care to prevent device breakage from static electricity because MOSFETs cannot withstand much static electricity.

These specifications are subject to change without notice.

MOSFETs Continued on next Page.