

New Products. Low On-resistance Power MOSFETs of new package SOP8 type

New Packages : SOP8 & MFP6 *SANYO has achieved about a 50% reduction in mount area and about a 30% reduction in thickness compared to the SC-63(TP). Minimum on-resistance per unit mount area (2.5V gate to source drive voltage) in the industry.

By developing new packages SOP8 and MFP6, small and thin surface mount packages, SANYO has developed a product line which enables you to make portable type information equipment lighter in weight and smaller in size. Moreover, complex type FW series (two-chip type) enables you to reduce parts and to miniaturize sets.

Features

- *The first SOP8 package power MOSFETs in the Japanese semiconductor industry.
- *Enables to lower power-supply voltage to 2.5V and to utilize battery drive.
- *On-resistance of 37m Ω (typical) by adopting minuter operation cells and optimum design.
- *Has a protective gate-to source built-in zener diode.
- *Enables reduction of parts count by adopting complex type FW series (dual-chip type)

2.5V/4V Drive Power MOSFETs

*Device marks are indicated in type No. figures. (Four digits).
PD, PT: Mounted on ceramic board(1000mm²X0.8mm)

For P-channel, "-" sign is omitted.

Type No.	Package	Absolute Maximum Ratings/Ta=25°C				Electrical Characteristics/Ta=25°C						Gate to source drive voltage
		V _{DSS}	V _{GSS}	I _D	P _D	V _{GS(off)}	y _{fs}	R _{DS(on)} (m Ω)			C _{iss}	
		(V)	(V)	(A)	(W)	(V)	typ (S)	VGS=2.5V typ/max	VGS=4V typ/max	VGS=10V typ/max	typ (pF)	
2SK2343	MFP6	20	$\pm$ 10	6	2	0.4~1.4	14	40/58	30/38	-	1000	2.5V
2SK2344		20	$\pm$ 12	7		0.5~1.5	18	37/50	25/35	-	1300	2.5V
2SK2384		30	$\pm$ 15	6		1~2	8	-	50/70	35/50	1000	4V
2SJ419	SOP8	12	$\pm$ 10	4		0.4~1.4	8	90/144	65/82	-	1000	2.5V
2SJ420		12	$\pm$ 10	5		0.4~1.4	12	70/108	50/63	-	1200	2.5V
2SK2440		20	$\pm$ 10	6		0.4~1.4	14	40/58	30/38	-	1000	2.5V
2SK2441		20	$\pm$ 10	7		0.4~1.4	18	37/48	25/32	-	1300	2.5V
2SJ421		30	$\pm$ 20	5		1~2.5	10	-	65/107	45/58	1000	4V
2SJ468		30	$\pm$ 25	4		1~2.5	6	-	125/170	80/100	650	4V
2SJ469		30	$\pm$ 25	5		1~2.5	8	-	100/160	55/80	800	4V
2SK2442		30	$\pm$ 20	7		1~2.5	12	-	34/48	24/29	1000	4V
2SK2556		30	$\pm$ 25	6		1~2.5	8	-	58/78	36/46	650	4V
2SK2557		30	$\pm$ 25	7		1~2.5	10	-	42/60	27/37	800	4V

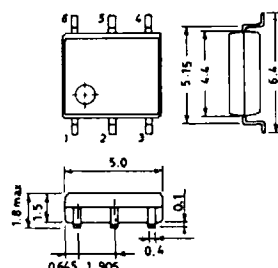
Complex type

FW101 (PchX2)	SOP8	12	$\pm$ 10	3	PT 2	0.4~1.4	8	115/165	85/115	-	650	2.5V
FW104 (PchX2)		12	$\pm$ 10	2		0.4~1.4	2.4	400/700	280/400	-	170	2.5V
FW201 (NchX2)		20	$\pm$ 12	5		0.4~1.4	10	54/78	38/50	-	650	2.5V
FW102 (PchX2)		20	$\pm$ 20	3		1~2.5	4	-	130/180	75/100	550	4V
FW202 (NchX2)		20	$\pm$ 20	5		1~2.5	8	-	48/65	32/40	550	4V
FW103 (PchX2)		30	$\pm$ 20	3		1~2.5	4	-	150/205	95/125	550	4V
FW203 (NchX2)		30	$\pm$ 20	5		1~2.5	8	-	58/78	36/46	550	4V

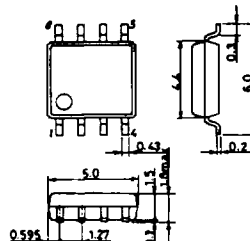
Case Outline(unit:mm)

- 1: Drain
2: Drain
3: Drain
4: Gate
5: Drain
6: Source

SANYO:MFP6



SANYO:SOP8



- Single type
1: Source
2: Source
3: Source
4: Gate
5: Drain
6: Drain
7: Drain
8: Drain

Dual type(Complex)

- 1: Source1
2: Gate1
3: Source2
4: Gate2
5: Drain2
6: Drain2
7: Drain1
8: Drain1

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.