

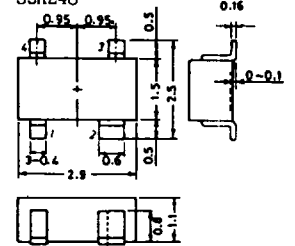
## Small-signal MOSFETs

**Features** \*Very low noise figure \*Large |Yfs| \*Low gate leak current  
 \*Small-sized package permitting FET-used sets to be made smaller  
 \*LF Amp, Low Noise, Analog Switch Impedance Conversion Applications

Case Outlines(unit:mm)  
 SANYO:CP4

1:Drain, 2:Source, 3:Gate, 4:Gate2  
 3SK180, 3SK181, 3SK251, 3SK263, 3SK264, 3SK265,  
 3SK266

1:Drain, 2:Back Gate, 3:Gate, 4:Source.  
 3SK248

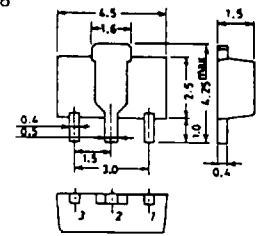


Type No. ( ):Marking	Package	Absolute Maximum Ratings/Ta=25°C			Electrical Characteristics/Ta=25°C					
		V <sub>DS</sub> (V)	I <sub>D</sub> (mA)	P <sub>D</sub> (mW)	Y <sub>fs</sub>   typ (mS)	C <sub>iss</sub> typ (PF)	C <sub>rss</sub> typ (PF)	V <sub>GS</sub> (V)	R <sub>DS(on)</sub> typ (Ω)	
2SK1839(JJ)	MCP	30	100	150	50	12	0.4	10	15	
2SK536(BJ)	CP	50	100	200	40	15	0.5	10	20	
2SK1840(JJ)	CP4	30	100	200	50	12	0.4	10	15	
3SK248(NJ)	CP4	10	100	200	80	50	5	5	5	
2SK669	SPA	50	100	200	40	15	0.5	10	20	
2SK1841	SPA	30	100	200	50	12	0.4	10	15	
2SK583	NP	50	200	600	40	15	0.5	10	20	

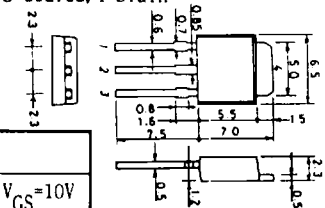
### HF Amp Applications

SANYO:PCP 1:Gate, 2:Drain, 3:Source.  
 J187, J190, J193, J287, J288, J289, K1311, K1467  
 K1470, K1473, K1724, K1726, K1728, K2167, K2168  
 K2260.

1:Source, 2:Gate, 3:Drain,  
 K2171, K2218



SANYO:TP 1:Gate, 2:Drain, 3:Source, 4:Drain



Type No. ( ):Marking	Package	Absolute Maximum Ratings/Ta=25°C			Electrical Characteristics/Ta=25°C					
		V <sub>DS</sub> (V)	I <sub>D</sub> (mA)	P <sub>D</sub> (mW)	Y <sub>fs</sub>   typ (mS)	C <sub>iss</sub> typ (PF)	C <sub>rss</sub> typ (PF)	V <sub>DS</sub> (V)	I <sub>DSS</sub> *IDSX (mA)	
2SK1067(CJ)	MCP	16	30	150	11	2.3	0.035	10	1.2 ~ 12	
2SK2268(WJ)	MCP	15	30	150	11	2.7	0.015	6	1.2 ~ 12	
2SK543(CJ)	CP	20	30	200	11	2.4	0.035	10	1.2 ~ 12	
2SK2269(WJ)	CP	15	30	200	11	2.7	0.015	6	1.2 ~ 12	
2SK544	SPA	20	30	300	11	2.4	0.035	10	1.2 ~ 12	
2SK2270	SPA	15	30	300	11	2.7	0.015	6	1.2 ~ 12	
3SK180(DJ)	CP4	15	30	200	20	3	0.02	10	2.5 ~ 24	
3SK181(EJ)		15	30	200	18	3	0.02	10	*2.5 ~ 24	
3SK251(PJ)		15	30	200	18	5	0.02	10	*2.5 ~ 24	
3SK263(RJ)		15	30	200	14	2.7	0.015	8	*2.5 ~ 24	
3SK264(SJ)		15	30	200	17	2.5	0.015	6	*5 ~ 24	
3SK265(TJ)		15	30	200	22	4	0.015	6	*5 ~ 24	
3SK266(UJ)		13.5	30	200	20	1.7	0.015	10	*2.5 ~ 24	

### High-voltage SW, High-speed SW.

PD=1.5W(PCP:Package):Mounted on ceramic board(250mm<sup>2</sup> X 0.8mm). \*Tc=25°C

Type No. ( ):Marking	Package	Absolute Maximum Ratings/Ta=25°C			Electrical Characteristics/Ta=25°C									
		V <sub>DSS</sub> (V)	I <sub>D</sub> (A)	P <sub>D</sub> (W)	yfs  typ (S)	C <sub>iss</sub> typ (PF)	C <sub>rss</sub> typ (PF)	V <sub>GS(off)</sub> 10V, 1mA min(V)max	R <sub>DS(on)</sub> :V <sub>GS</sub> =10V typ (Ω) max					
2SJ284(AM) / 2SK1847(KJ)	CP	30	0.3/0.5	0.25	0.35/0.7	50	10	1	2	1.5/0.5	2.2/0.75			
2SJ285(BM) / 2SK1848(LJ)		60	0.25/0.4	0.25	0.35/0.6	45	5	1	2	2.2/0.9	3.0/1.2			
2SJ286(CM) / 2SK1849(MJ)		100	0.15/0.25	0.25	0.27/0.5	45	3	1	2	5.5/2.7	7.5/3.5			
2SJ187(JA) / 2SK1311(KB)	PCP	60	-/2		-/1.7	-/160	-/12	0.8	2.5	-/0.35	-/0.45			
2SJ190(JB) / 2SK1467(KC)		30	1/2		1/2	170	20/30	1	2	0.5/0.2	0.75/0.3			
2SJ193(JC) / 2SK1470(KD)		60	1/2		1/2	160/150	10/12	1	2	0.9/0.35	1.2/0.45			
2SJ287(JD) / 2SK1724(KF)		100	1/2		1/2	160/150	6	1	2	1.8/0.7	2.4/0.95			
2SJ288(JE) / 2SK1726(KG)		30	0.5/1	*3.5	0.4/1	50	10	1	2	1.5/0.5	2.2/0.75			
2SJ289(JF) / 2SK1728(KH)		60	0.5/1		0.4/1	45	5	1	2	2.2/0.9	3.0/1.2			
- / 2SK2167(KK)		100	0.5/1		0.4/1	45	3	1	2	5.5/2.7	7.5/3.5			
- / 2SK2168(KL)	250	-/0.4		-/0.4	37	4	1.5	2	-/8	-/12				
- / 2SK2260(KO)	250	-/0.8		-/0.9	80	8	1.5	2	-/3.5	-/5				
- / 2SK2260(KO)	150	-/1.2		-/1.1	80	8.5	1.5	2	-/1.6	-/2.2				
2SJ188 / 2SK1468	TP	30	2/4	*20	2/4	400	110/90	1	2	0.2/85m	0.3/0.12			
2SJ189 / 2SK1469		30	4/8	*30	4/8	1000	220/180	1	2	85m/40m	0.12/55m			
2SJ191 / 2SK1471		60	2/4	*20	2/4	380	40/30	1	2	0.35/0.15	0.45/0.2			
2SJ192 / 2SK1472		60	4/8	*30	4/8	950	75/50	1	2	0.15/60m	0.2/80m			
2SJ194 / 2SK1474		100	2/4	*20	2/4	380	20/15	1	2	0.7/0.3	0.95/0.4			
2SJ195 / 2SK1475		100	4/8	*30	4/8	950	40/30	1	2	0.3/0.12	0.4/0.16			
2SJ281 / 2SK1920		250	3/4	*30	2.5/4	420	40/30	1.5	2	1.5/0.5	2/0.7			
2SJ362 / -		60	2/-	*20	2/-	240	40/-	1.5	2	0.3/-	0.4/-			
2SJ453 / -		250	3/-	*30	2.5/-	420	40/-	1.5	2	2.6/-	2.6/-			
- / 2SK2046		30	-/12	*30	-/8	1000	-/180	1	2	-/35m	-/50m			
- / 2SK2199	250	-/0.8	*15	-/0.9	80	-/8	1.5	2	-/3.5	-/5				
- / 2SK2406	450	-/1	*30	-/0.8	300	-/8	2	2	-/3.5	-/4.5				
- / 2SK2530	250	-/2	*20	-/2	160	-/15	1.5	2	-/1.5	-/2				
2SJ225 / 2SK1725	NMP	30	1	1	1	170/50	20/10	1	2	0.5	0.75			
2SJ228 / 2SK1727		60	0.8	1	0.9	160/45	10/5	1	2	0.9	1.2			
2SJ231 / 2SK1729		100	0.5	1	0.7	160/45	6/3	1	2	1.8/2.7	2.4/3.5			
- / 2SK1730		30	-/1.8	1	-/2	-/170	-/30	1	2	-/0.2	-/0.3			
- / 2SK1733		60	-/1.5	1	-/1.8	-/150	-/12	1	2	-/0.35	-/0.45			
- / 2SK1736	100	-/1	1	-/1.5	-/150	-/6	1	2	-/0.7	-/0.95				
- / 2SK2169	250	-/0.4	1	-/0.6	-/80	-/8	1.5	2	-/3.5	-/5				
2SJ226 / 2SK1731	FLP	30	2/3	1.5	2/3.5	400	110/90	1	2	0.2/0.1	0.3/0.14			
2SJ227 / 2SK1732		30	3/4.5	1.5	3.5/6.5	1000	220/180	1	2	95m/50m	130m/65m			
2SJ229 / 2SK1734		60	1.6/2.5	1.5	1.8/3.3	380	40/30	1	2	0.35/0.17	0.45/0.22			
2SJ230 / 2SK1735		60	2.5/4	1.5	3.5/5.5	950	75/50	1	2	0.16/70m	0.21/90m			
2SJ232 / 2SK1737		100	1.2/1.8	1.5	1.6/2.8	380	20/15	1	2	0.7/0.3	0.95/0.4			
2SJ233 / 2SK1738		100	1.8/3	1.5	2.8/5.0	950	40/30	1	2	0.3/0.13	0.4/0.17			

SANYO:NMP 1:Source, 2:Drain, 3:Gate.

SANYO:FLP 1:Source, 2:Drain, 3:Gate.

In addition to the above we have power MOSFETs see the quick guides.

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

These specifications are subject to change without notice.

Next page.