

Large-signal Power MOSFETs (3)

The Sanyo J-MOS series utilizes Sanyo's own fine fabrication process for power devices to develop an entire series of ultrahigh performance power devices capable of high voltage, high speed and large current operation.

With performance of wide applications for virtually any types of power electronic equipment, the UH Series, AP Series and LD Series offer the most suitable devices to meet specific needs.

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

AP Series (Advanced Performance)

The AP Series provides an on-state resistance approximately 40% lower than the existing J-MOS series.

A precisely controlled, channel forming process is used to achieve a threshold value variation width of 0.5V resulting in easy parallel connection operation essential for large current circuits. (VGS±30V guaranteed in VDSS 450V series.)

Designed as a power MOSFET with well-balanced characteristics, the AP Series provides the ultimate in high-power performance. The surface mounting TP, SMP and ZP package enables higher density assembly and higher reliability.

Applications

* Battery charger, Ac adapter, motor control, inverter lighting, switching power supply, AV equipment etc.

VDSS 100V system

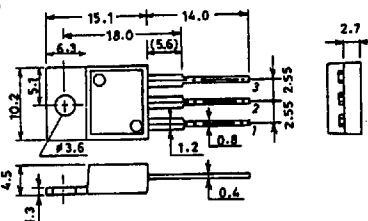
(2SJ type:P channel (-) sign is omitted.)

Type No.	Package	Absolute Maximum Ratings					Electrical Characteristics/Ta=25℃				Type No.
		V _{DSS} (V)	V _{GSS} (V)	I _D (A)	I _{DP} (A)	P _D Tc=25℃ (W)	V _{GS(off)} min ~ max (V)	R _{DS(on)} V _{GS} =10V (Ω) typ/max	Ciss typ (pF)		
*:FRD built in											*:FRD built in
2SK1427 2SK1428 2SK1429	TO-220	100	±20	10	40	40	1.5~2.5	120m/160m	750	2SK1427	
				20	80	60		75m/100m	1200	2SK1428	
				30	120	70		40m/55m	2400	2SK1429	
2SK1430 2SK1431 2SK1432	TO-220ML			10	40	25		120m/160m	750	2SK1430	
				15	60	30		75m/100m	1200	2SK1431	
				25	100	40		40m/55m	2400	2SK1432	
2SK1433 2SK1434	TO-3PB			30	120	100		40m/55m	2400	2SK1433	
				60	240	150		23m/35m	4800	2SK1434	
2SK1435 2SK1436	TO-3PML			30	120	60		40m/55m	2400	2SK1435	
				50	200	80		23m/35m	4800	2SK1436	
2SK1437	TO-3PBL			70	280	200		16m/26m	7200	2SK1437	

Case Outlines(unit:mm)

SANYO: TO-220

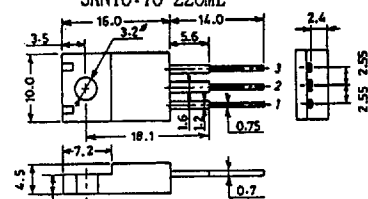
1:Gate, 2:Drain, 3:Source



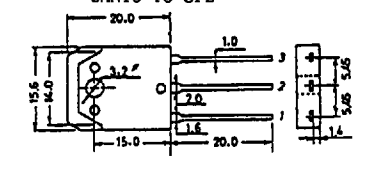
VDSS 200V system

2SK2864 2SK2970	Z P	200	± 20	20 13	80 52	50 40	2~4 2~5	90m/120m 180m/240m	1700 750	2SK2864 2SK2970
2SJ403 2SJ404 2SJ405 2SJ406	TO-220ML			5 6 8 12	20 24 32 48	25 25 30 40	1.5~2.5	0.8/1.1 0.6/0.8 0.37/0.5 0.17/0.23	550 700 1100 2400	2SJ403 2SJ404 2SJ405 2SJ406
2SK2160 2SK2161 2SK2378 2SK2379				7 9 13 20	28 36 52 80	25 25 30 40		350m/450m 250m/350m 160m/210m 70m/95m	550 700 1100 2400	2SK2160 2SK2161 2SK2378 2SK2379

SANYO:TO-220M



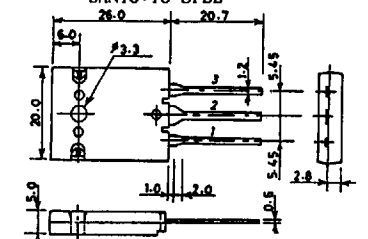
SANYO:TO-3PB



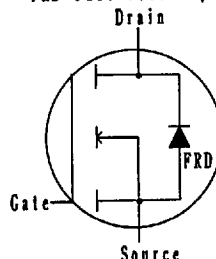
VDSS 250V system

2SJ454* 2SJ455* 2SJ456*	Z P	250	± 30	5 7 9	20 28 36	40 45 50	2~3	0.85/1.2 0.6/0.85 0.4/0.55	900 1290 1950	2SJ454* 2SJ455* 2SJ456*	
2SK2531* 2SK2532* 2SK2533* 2SK2534*				6 10 13 16	24 40 52 64	30 40 45 50		0.6/0.8 0.28/0.39 0.2/0.27 0.13/0.18	420 900 1290 1950	2SK2531* 2SK2532* 2SK2533* 2SK2534*	
2SK2321 2SK2592*				12 13	48 52	70 60		1.5~2.5 2~3	0.25/0.35 0.2/0.27	1250 1290	2SK2321 2SK2592*
2SJ282				3	12	50		1.5~2.5	1.5/2	600	2SJ282
2SK1921 2SK2142	4 12			16 48	50 70	0.5/0.7 0.25/0.35	600 1250		2SK1921 2SK2142		
2SK2680LS* 2SK2681LS* 2SK2682LS* 2SK2683LS*	T0220FI (LS)			6 10 13 16	24 40 52 64	25 30 35 40	2~3	0.6/0.8 0.28/0.39 0.2/0.27 0.13/0.18	420 900 1290 1950	2SK2680LS* 2SK2681LS* 2SK2682LS* 2SK2683LS*	
2SJ306 2SJ307 2SJ308 2SJ320	TO-220ML			3 6 9 4	12 24 36 16	25 30 40 25		1.5~2.5	1.5/2 0.75/1 0.35/0.48 1/1.3	600 1250 2700 750	2SJ306 2SJ307 2SJ308 2SJ320
2SK2010 2SK2011 2SK2012 2SK2108				4 12 18 6	16 48 72 24	25 30 40 25			0.5/0.7 0.25/0.35 0.12/0.16 0.38/0.5	600 1250 2700 750	2SK2010 2SK2011 2SK2012 2SK2108
2SK2058				T0-3PB	25	100			120	0.12/0.16	2700

SANYO:TO-3PRI



*FRD: Fast recovery diode



Underlined type Nos. are before mass production.

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.

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