

## New Product Low On-Resistance Power MOSFETs

Low on-resistance Power MOSFETs (J-MOS: VDSS: 12V/20V/30V Series)

Sanyo Power MOSFETs [J-MOS Series] meet the market needs of lower voltage drive and miniaturized surface mounting devices.

Therefore, Sanyo Power MOSFETs 「J-MOS Series」 are the most suited devices for notebook PCs, handy phones, video cameras etc. which require long life operation with limited power capacity of batteries.

For samples and shipment contact our Product Planning Dept. of TR Division.

## 4V-drive Power MOSFETs

PD  $\diamond$  sign (Package: XP, FP6): Mounted on ceramic board (900mm<sup>2</sup> × 0.8mm). PD \* sign: Ta = 25°C.

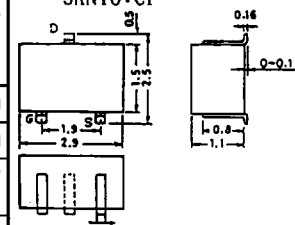
For P channel (-) sign is omitted. (Package:XP,MFP6):Marking is the figures of type No.

| Type No.<br><br>( ) : Marking      | Package | Absolute Maximum Ratings/Ta=25℃ |                         |                                              |                       | Electrical Characteristics/Ta=25℃ |                                 |                       |                                    |                                |                                 |
|------------------------------------|---------|---------------------------------|-------------------------|----------------------------------------------|-----------------------|-----------------------------------|---------------------------------|-----------------------|------------------------------------|--------------------------------|---------------------------------|
|                                    |         | V <sub>DSS</sub><br>(V)         | V <sub>GSS</sub><br>(V) | I <sub>D</sub><br>(A)<br>T <sub>c</sub> =25℃ | P <sub>D</sub><br>(W) | V <sub>GS(off)</sub><br>(V)       | y <sub>fs</sub>  <br>typ<br>(S) | I <sub>D</sub><br>(A) | R <sub>DS(on)</sub>                |                                | C <sub>iss</sub><br>typ<br>(pF) |
|                                    |         |                                 |                         |                                              |                       |                                   |                                 |                       | V <sub>GS</sub> =10V<br>typ/max(Ω) | V <sub>GS</sub> =4V<br>typ/max |                                 |
| 2 S J 3 3 5 (JH)                   | P C P   | 12                              | ±12                     | 0.5                                          | 3.5                   | 1~2                               | 1.2                             | 0.25                  | 1/1.4                              | 1.6/2.3                        | 50                              |
| 2 S J 3 1 6 (JG)                   | P C P   |                                 | ±12                     | 1                                            | 3.5                   |                                   | 1.2                             | 0.5                   | 0.3/0.42                           | 0.45/0.63                      | 170                             |
| F X 6 0 1 (601)<br>Related:J316X2  | X P 6   |                                 | ±12                     | 1                                            | ◇1.5                  |                                   | 1.2                             | 0.5                   | 0.3/0.42                           | 0.45/0.63                      | 37                              |
| 2 S J 3 3 6                        | T P     |                                 | ±12                     | 2                                            | 20                    |                                   | 2                               | 1                     | 0.15/0.21                          | 0.25/0.35                      | 400                             |
| 2 S J 3 3 7                        | T P     |                                 | ±12                     | 8                                            | 30                    |                                   | 6                               | 4                     | 65m/90m                            | 0.11/0.15                      | 1000                            |
| 2 S K 2 2 7 3 (XJ)                 | C P     | 20                              | ±15                     | 0.5                                          | *0.25                 |                                   | 0.7                             | 0.25                  | 0.35/0.48                          | 0.55/0.75                      | 50                              |
| 2 S K 2 1 5 1 (KI)                 | P C P   |                                 | ±15                     | 1                                            | 3.5                   |                                   | 1                               | 0.5                   | 0.35/0.48                          | 0.55/0.75                      | 50                              |
| 2 S K 2 1 5 2 (KJ)                 | P C P   |                                 | ±15                     | 2                                            | 3.5                   |                                   | 2                               | 1                     | 0.13/0.18                          | 0.17/0.25                      | 170                             |
| F X 2 0 2 (202)<br>Related:K2153X2 | X P 5   |                                 | ±18                     | 4                                            | ◇2                    |                                   | 4                               | 2                     | 65m/90m                            | 85m/0.12                       | 400                             |
| F X 6 0 2 (602)<br>Related:K2152X2 | X P 6   |                                 | ±15                     | 2                                            | ◇1.5                  |                                   | 0.8~2                           | 2                     | 1                                  | 0.13/0.18                      | 0.18/0.25                       |
| 2 S K 2 1 5 3                      | T P     |                                 | ±18                     | 4                                            | 20                    | 1~2                               | 5                               | 2                     | 65m/90m                            | 85m/0.12                       | 400                             |
| 2 S K 2 1 5 4                      | T P     |                                 | ±18                     | 12                                           | 30                    | 0.8~2                             | 10                              | 6                     | 30m/42m                            | 45m/58m                        | 1000                            |
| 2 S K 2 3 8 4                      | MFP6    |                                 | 30                      | ±18                                          | 6                     | ◇1.2                              | 1~2                             | 8                     | 4                                  | 35m/50m                        | 50m/70m                         |

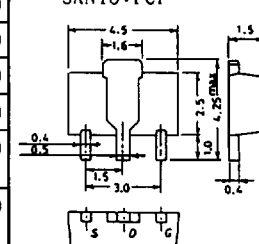
## Case Outlines

(unit:mm)

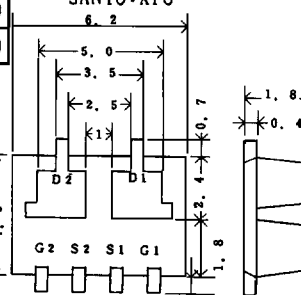
SANYO:CP



SANYO:PCP



SANYO:XP6



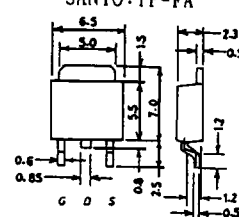
## 2.5V-drive Power MOSFETs

PD  $\diamond$  sign (Package:XP,FP6):Mounted on ceramic board(900mm<sup>2</sup>X0.8mm). PD \* sign:Ta=25℃.

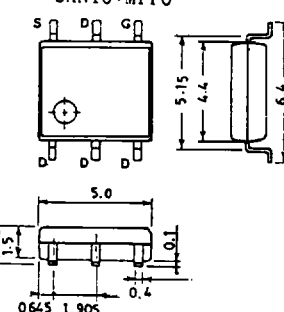
For P channel (-) sign is omitted. (Package:XP,MFP6):Marking is the figures of type No.

| Type No.<br>( ): Marking         | Package | Absolute Maximum Ratings/Ta=25°C |                         |                                               |                       | Electrical Characteristics/Ta=25°C |                                 |                       |                        |                                        |                                 |
|----------------------------------|---------|----------------------------------|-------------------------|-----------------------------------------------|-----------------------|------------------------------------|---------------------------------|-----------------------|------------------------|----------------------------------------|---------------------------------|
|                                  |         | V <sub>DSS</sub><br>(V)          | V <sub>GSS</sub><br>(V) | I <sub>D</sub><br>(A)<br>T <sub>C</sub> =25°C | P <sub>D</sub><br>(W) | V <sub>GS(off)</sub><br>(V)        | y <sub>fs</sub>  <br>typ<br>(S) | I <sub>D</sub><br>(A) | V <sub>GS</sub><br>(V) | R <sub>DS(on)</sub><br>typ/max<br>(mΩ) | C <sub>iss</sub><br>typ<br>(pF) |
| 2 S J 3 8 1 (J1)                 | P C P   | 12                               | ±10                     | 2                                             | 3.5                   | 0.5~1.5                            | 2.4                             | 1<br>0.5              | 4<br>2.5               | 280/400<br>400/700                     | 170                             |
| F X 2 0 7 (207)<br>Related:J382  | X P 5   |                                  | ±12                     | 4                                             | ◇2                    |                                    | 4                               | 2<br>1                | 4<br>2.5               | 115/220<br>240/380                     | 400                             |
| 2 S J 3 8 2                      | T P     |                                  | ±12                     | 4                                             | 20                    |                                    | 4                               | 2<br>1                | 4<br>2.5               | 115/220<br>240/380                     | 400                             |
| 2 S J 3 8 3                      | T P     |                                  | ±12                     | 8                                             | 30                    |                                    | 8                               | 4<br>1.5              | 4<br>2.5               | 70/100<br>110/200                      | 1000                            |
| 2 S K 2 3 1 6 (KP)               | P C P   | 20                               | ±10                     | 2                                             | 3.5                   |                                    | 2.8                             | 1<br>1                | 4<br>2.5               | 140/200<br>200/320                     | 170                             |
| F X 2 0 8 (208)<br>Related:K2317 | X P 5   |                                  | ±12                     | 4                                             | ◇2                    |                                    | 5                               | 2<br>1                | 4<br>2.5               | 65/95<br>100/160                       | 400                             |
| 2 S K 2 3 1 7                    | T P     |                                  | ±12                     | 4                                             | 20                    |                                    | 5                               | 2<br>1                | 4<br>2.5               | 65/95<br>100/160                       | 400                             |
| 2 S K 2 3 1 8                    | T P     |                                  | ±12                     | 12                                            | 30                    |                                    | 14                              | 6<br>2                | 4<br>2.5               | 30/40<br>45/60                         | 1000                            |
| 2 S K 2 3 4 3                    | MFP6    |                                  | ±12                     | 6                                             | ◇1.2                  |                                    | 14                              | 6<br>2                | 4<br>2.5               | 30/40<br>45/60                         | 1000                            |
| 2 S K 2 3 4 4                    | MFP6    |                                  | ±12                     | 6                                             | ◇1.2                  |                                    | 17                              | 6<br>2                | 4<br>2.5               | 25/35<br>37/50                         | 1400                            |

SANYO:TP-FA



SANYO:MFP6



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.