

High Voltage MOSFETs

MOSFET Features

Toshiba power MOSFET lineup ranges from 60V to 1000V and from 0.5A to 60A. All devices are enhancement types, which means the transistor is normally off. Our wide variety of different packages offers choices for all possible designs.

SMD (Surface Mount Devices) are ideal for telecommunications, laptops, HDD/FDD drives and portable equipment. Its SOT-89, DPak, TO-220(FL), and NPM packages covers most applications.

High voltage MOSFETs are ideal solutions for switch mode power supply, lamp ballast, and motor drive applications. All high voltage devices have an avalanche capability guarantee for inductive switching. Some of these devices are optimized for high speed switching applications and the parasitic diode can be utilized as a fast free wheeling diode.

Isolated packages in TO-220N(IS) and TO-3PN(IS) do not require any mica washers so the component count is reduced and assembly costs are minimized.

Toshiba D-MOS (Double Diffusion MOS) is ideal for high current, high blocking voltage, and its highly integrated structure achieves low on resistance.

High Voltage π -MOSFET Product Matrix

V_{DSS} (V) \ I_D (A)	500	600	800	900	1000
2.0		■ 2SK1769[4.0]		○ 2SK1603[6.4]	
3.0				○ 2SK1356[4.3]	
3.5		○ 2SK1767[2.5]			
4.0		○ 2SK1913[1.8]			● 2SK1119[3.8]
5.0			▲ 2SK2038[2.2]	○ 2SK1362[2.5]	▲ 2SK1359[3.8]
6.0		○ 2SK1118[1.25]			
7.0	○ 2SK1805[0.85]				△ 2SK1365[1.8]
8.0				△ 2SK1363[1.4]	▲ 2SK1120[1.8]
9.0			▲ 2SK2078[1.2]	▲ 2SK1358[1.4]	
10.0	▲ 2SK1488[1.0]				
12.0	● 2SK1865SM[0.7]	▲ 2SK1723[0.65]			▲ 2SK1489[1.0]
15.0	▲ 2SK1531[0.45]	PACKAGE CODE ● TO-220AB ○ TO-220(IS) ● TO-220FL/SM ▲ TO-3P(L) ▲ TO-3P(N) △ TO-3P(IS) ■ NPM			
18.0	▲ 2SK1745[0.36]				
20.0	▲ 2SK2057[0.29]				
25.0	▲ 2SK1544[0.2]				

[]: $R_{DS(ON)}$ MAX. at $V_{GS} = 10V$

For more information on Toshiba's MOSFETs please refer to the Power MOSFET Product Guide; Order #4654141.