

## Introduction of small-package MOSFET

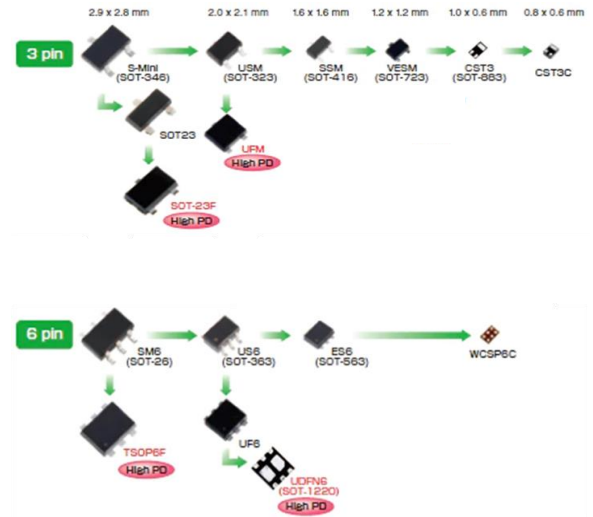
Small package MOSFET ideal for IoT devices and mobile devices.

Toshiba has a large lineup of small-signal MOSFETs (S-MOS) with small package. The products include industry-standard packages such as CST3 (SOT-882), VESM (SOT-723) and SOT23.

The maximum rated voltage of typical characteristics is available up to 100V, and supports a wide range applications from signal control to power supply control.

Surface mount packages are effective in reducing the mounting area of PCB, and are suitable for applications requiring smaller and light weight, such as IoT devices and mobile equipment.

We are also expanding Spice models, which are indispensable design tools, to help users select and design products more easily. Please try it once.



### Features













- Small packages: 0.8mmX 0.6mm ~ 2.9mmX 2.8mm
- Wide voltage rating Lineup:  $V_{DSS}=12 \sim 100$  V
- Low on-resistance:  $6.5m\Omega \sim @4.5$  V
- Halogen-free and ROHS compliant

### •Small package MOSFET selection table

N-ch MOSFET [single]








$V_{DSS}$ (V)	Package											
	CST3C	CST3 (SOT-883)	WCSP6C	VESM (SOT-723)	SSM (SOT-416)	ES6 (SOT-563)	UDFN6B (SOT-1220)	UFM (SOT323F) USM (SOT-323)	UF6 (SOT-363F)	SOT-23F SOT23 (SOT-23)	S-Mini (SOT-346)	TSOP6F
	0.8 x 0.6 (mm)	1.0 x 0.6 (mm)	1.5 x 1.0 (mm)	1.2 x 1.2 (mm)	1.6 x 1.6 (mm)	1.6 x 1.6 (mm)	2.0 x 2.0 (mm)	2.0 x 2.1 (mm)	2.0 x 2.1 (mm)	2.9 x 2.4 (mm)	2.9 x 2.5 (mm)	2.9 x 2.8 (mm)
12												
20	○	○		○	○	○	○	○	○	○		○
30	○	○		○	○	○	○	○	○	○	○	○
38										○		
40						○	○			○		○
60	○	○			○		○	○	○	○	○	○
100							○	○	○	○		○

## P-ch MOSFET [single]

V <sub>DSS</sub> (V)	Package											
	CST3C	CST3 (SOT-883)	WCSP6C	VESM (SOT-723)	SSM (SOT-416)	ES6 (SOT-563)	UDFN6B (SOT-1220)	UFM (SOT323F) USM (SOT-323)	UF6 (SOT-363F)	SOT-23F SOT23 (SOT-23)	S-Mini (SOT-346)	TSOP6F
												
	0.8 x 0.6 (mm)	1.0 x 0.6 (mm)	1.5 x 1.0 (mm)	1.2 x 1.2 (mm)	1.6 x 1.6 (mm)	1.6 x 1.6 (mm)	2.0 x 2.0 (mm)	2.0 x 2.1 (mm)	2.0 x 2.1 (mm)	2.9 x 2.4 (mm)	2.9 x 2.5 (mm)	2.9 x 2.8 (mm)
-12	<a href="#">○</a>					<a href="#">○</a>	<a href="#">○</a>	<a href="#">○</a>				
-20	<a href="#">○</a>	<a href="#">○</a>	<a href="#">○</a>	<a href="#">○</a>	<a href="#">○</a>	<a href="#">○</a>	<a href="#">○</a>	<a href="#">○</a>	<a href="#">○</a>	<a href="#">○</a>	<a href="#">○</a>	<a href="#">○</a>
-30		<a href="#">○</a>		<a href="#">○</a>	<a href="#">○</a>	<a href="#">○</a>	<a href="#">○</a>	<a href="#">○</a>	<a href="#">○</a>	<a href="#">○</a>	<a href="#">○</a>	<a href="#">○</a>
-40												<a href="#">○</a>
-60										<a href="#">○</a>	<a href="#">○</a>	

## • MOSFET selection table

[Dual / Complimentary]

Polarity	V <sub>DSS</sub> (V)	Package							
		ESV (SOT-553)	ES6 (SOT-563)	UDFN6 (SOT-1118)	USV (SOT-353)	UF6 (SOT-363F)	US6 (SOT-363)	TSOP6F (SOT-26F)	TCSPAG -341501
									
		1.6 x 1.6 (mm)	1.6 x 1.6 (mm)	2.0 x 2.0 (mm)	2.0 x 2.1 (mm)	2.0 x 2.1 (mm)	2.9 x 2.8 (mm)	3.37 x 1.47 (mm)	
N-chx2	20	<a href="#">○</a>	<a href="#">○</a>	<a href="#">○</a>	<a href="#">○</a>	<a href="#">○</a>			
N-chx2	30	<a href="#">○</a>	<a href="#">○</a>	<a href="#">○</a>	<a href="#">○</a>	<a href="#">○</a>		<a href="#">○</a>	
N-chx2	50					<a href="#">○</a>			
N-chx2	60		<a href="#">○</a>			<a href="#">○</a>	<a href="#">○</a>		
P-chx2	-20	<a href="#">○</a>	<a href="#">○</a>	<a href="#">○</a>		<a href="#">○</a>			
P-chx2	-30		<a href="#">○</a>		<a href="#">○</a>	<a href="#">○</a>			
N-ch+P-ch	20/-20		<a href="#">○</a>	<a href="#">○</a>		<a href="#">○</a>			
N-ch+P-ch	30/-20					<a href="#">○</a>	<a href="#">○</a>		
N-ch+P-ch	30/-30					<a href="#">○</a>			

## LINK

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