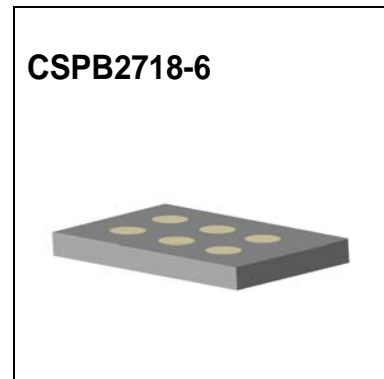


Dual N-Channel MOSFET

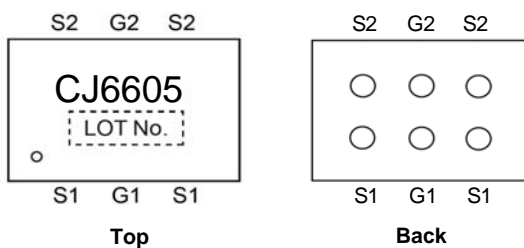
V _{SSS}	R _{SS(on)} TYP	I _S
12V	5.5 mΩ @ 4.5V	13A
	5.7mΩ @ 4.0V	
	5.8mΩ @ 3.8V	
	6.2mΩ @ 3.1V	
	6.9mΩ @ 2.5V	



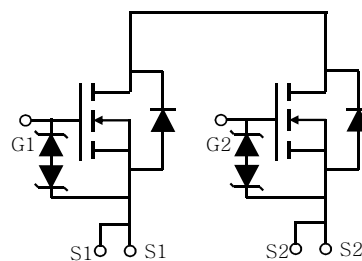
DESCRIPTION

The FTK6605SP uses advanced trench technology to provide excellent R_{SS(ON)}, low gate charge and operation with gate voltages as low as 2.5V while retaining a 12V V_{GS(MAX)} rating. It is ESD protected. This device is suitable for use as a unidirectional or bi-directional load switch, facilitated by its common-drain configuration.

Marking and pin assignment



Equivalent Circuit



Absolute Maximum Ratings (T_A = 25°C unless otherwise noted)

Symbol	Parameter	Limit	Unit
V _{SSS}	Source to Source Voltage	12	V
V _{GSS}	Gate-Source Voltage	±12	V
I _S	Source Current(DC) ¹	13	A
I _{SP}	Source Current (Pulse) ^{1,2}	60	A
P _T	Total Dissipation ¹	2.0	W
T _{ch}	Channel Temperature	150	°C
T _{STG}	Storage Temperature	-55 To 150	°C

- Note.**
1. Mounted on FR4 board (25.4 mm × 25.4 mm × t1.0 mm) using the minimum recommended pad size (36um Copper).
 2. t = 10us, Duty Cycle ≤ 1%



FTK6605SP

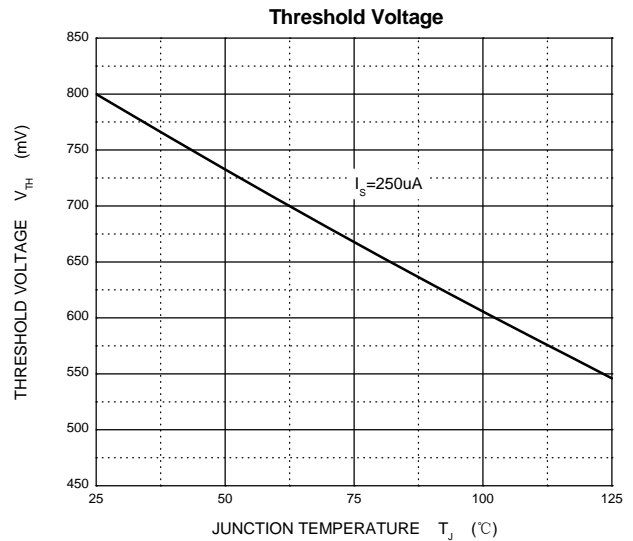
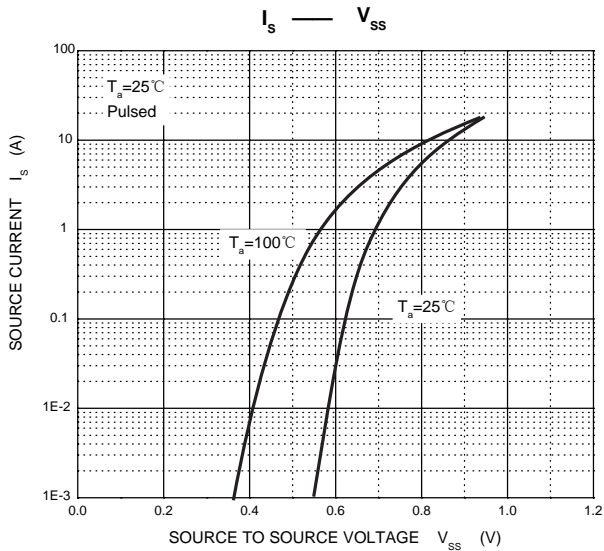
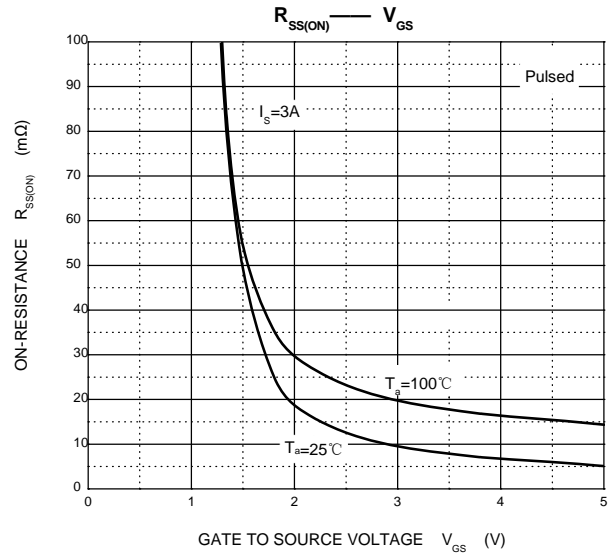
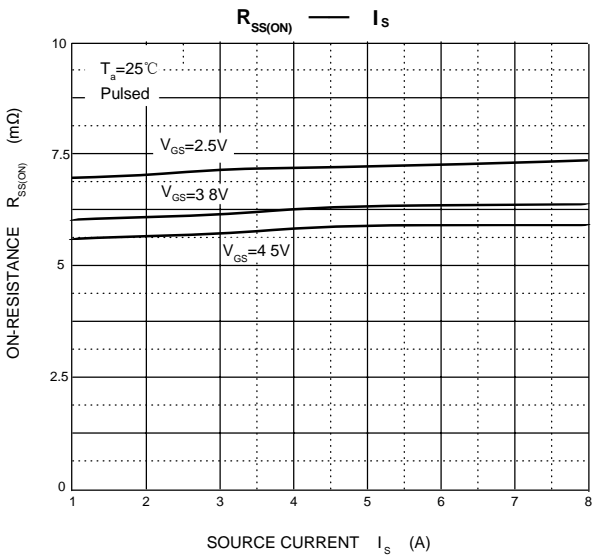
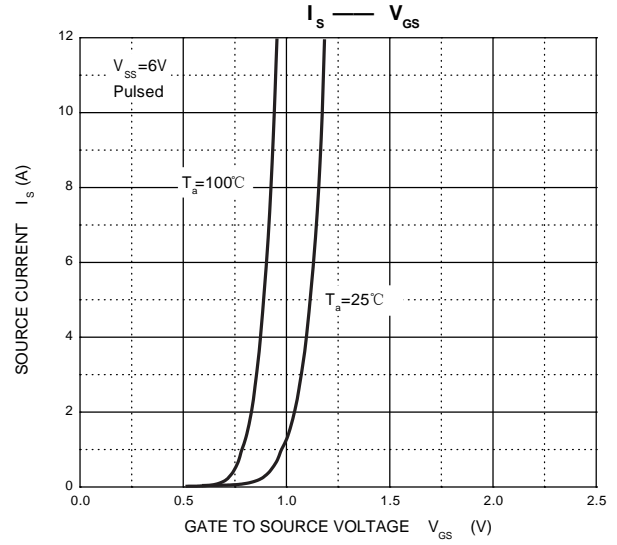
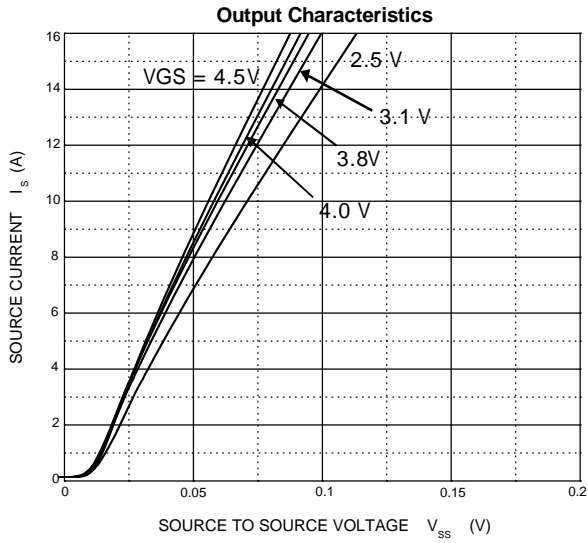
Electrical Characteristics ($T_A=25^\circ\text{C}$ unless otherwise noted)

Symbol	Parameter	Condition	Min	Typ	Max	Unit
Static Parameters						
BV_{SSS}	Source to Source Breakdown Voltage	$I_S=250\mu\text{A}$, $V_{GS}=0\text{V}$	12			V
I_{SSS}	Zero- Gate Voltage Source Current	$V_{SS}=10\text{V}$, $V_{GS}=0\text{V}$	-	-	1	μA
I_{GSS}	Gate to Source Leakage Current	$V_{SS}=0\text{V}$, $V_{GS}=\pm 8\text{V}$	-	-	± 10	μA
$V_{GS(off)}$	Cutoff Voltage	$V_{SS}=6\text{V}$, $I_S=250\mu\text{A}$	0.4	0.7	1.3	V
$ y_{GFs} $	Forward Transfer Admittance	$V_{SS}=6\text{V}$, $I_S=3\text{A}$	6.5	-	-	S
$R_{SS(on)}$	Static Source to Source On-Resistance	$V_{GS}=4.5\text{V}$, $I_S=3\text{A}$	4.0	5.5	7.5	$\text{m}\Omega$
		$V_{GS}=4.0\text{V}$, $I_S=3\text{A}$	4.3	5.7	8.0	$\text{m}\Omega$
		$V_{GS}=3.8\text{V}$, $I_S=3\text{A}$	4.6	5.8	8.5	$\text{m}\Omega$
		$V_{GS}=3.1\text{V}$, $I_S=3\text{A}$	4.9	6.2	9.5	$\text{m}\Omega$
		$V_{GS}=2.5\text{V}$, $I_S=3\text{A}$	5.3	6.9	12.0	$\text{m}\Omega$
$t_{d(on)}$	Turn-on Delay Time	$V_{SS}=10\text{V}$, $I_S=3\text{A}$, $V_{GS}=4.5\text{V}$	-	3.2	-	μS
t_r	Turn-on Rise Time		-	7.8	-	μS
$t_{d(off)}$	Turn-Off Delay Time		-	28	-	μS
t_f	Turn-Off Fall Time		-	25	-	μS
Q_g	Total Gate Charge	$V_{SS}=10\text{V}$, $I_S=6\text{A}$, $V_{GS}=4.5\text{V}$	-	36	-	nC
$V_{F(S-S)}$	Diode Forward Voltage	$V_{GS}=0\text{V}$, $I_S=6\text{A}$	-	0.9	1.2	V



FTK6605SP

Typical Characteristics

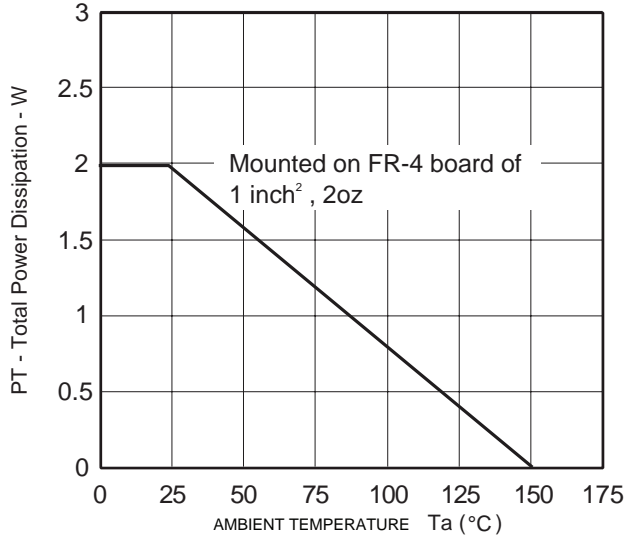




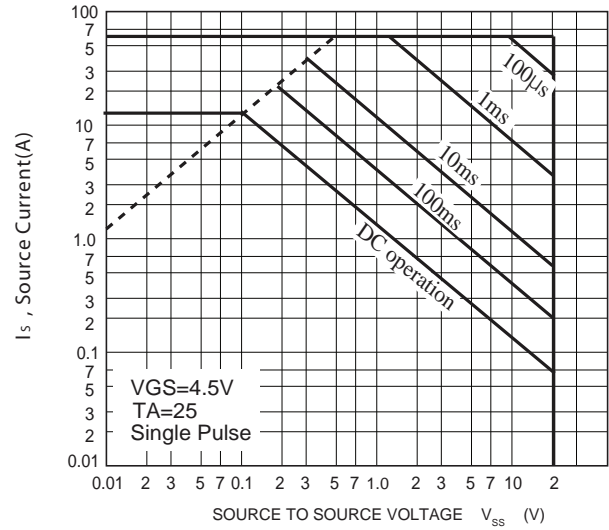
FTK6605SP

Typical Characteristics(Con.)

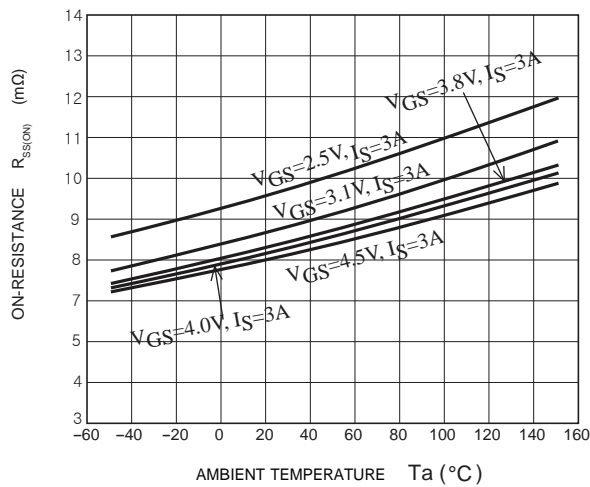
TOTAL POWER DISSIPATION vs. AMBIENT TEMPERATURE



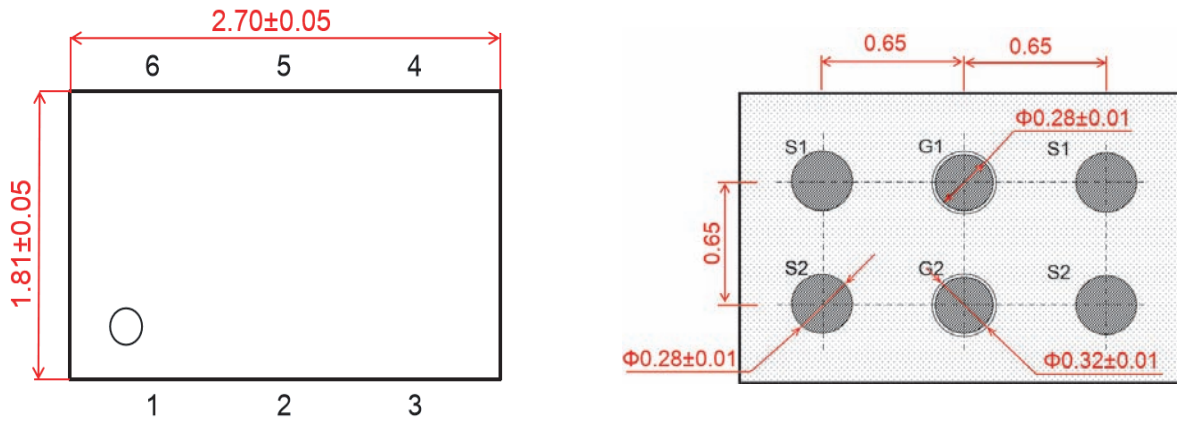
Maximum Safe Operating Area



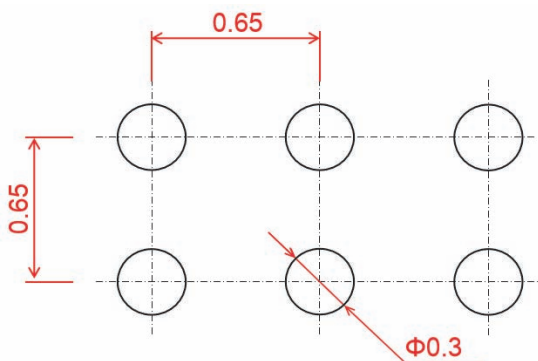
R_{SS(ON)} — Ta



CSPB2718-6 Package Outline Dimensions(Unit:mm)

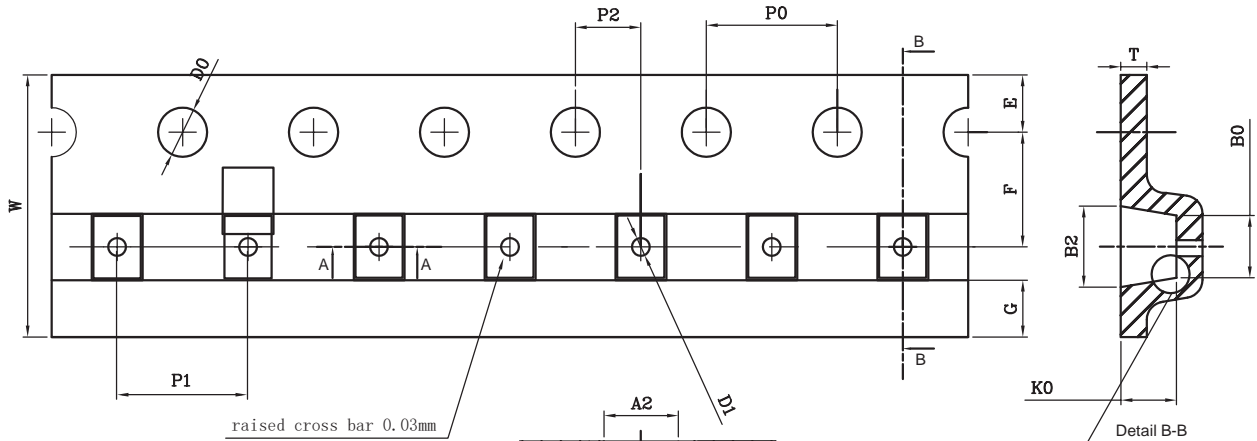


CSPB2718-6 Suggested Pad Layout (Unit:mm)



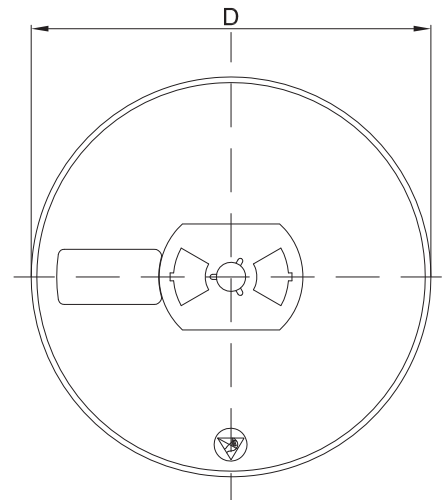
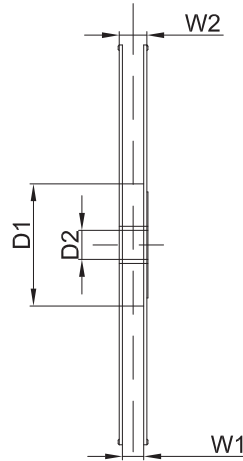
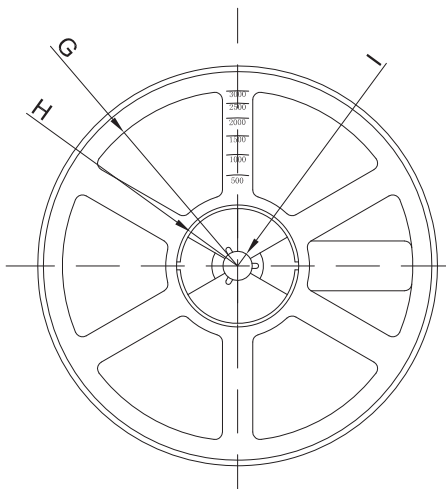
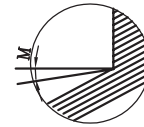
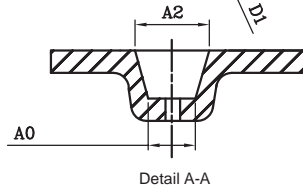
Note:
 1. Controlling dimension: in millimeters.
 2. General tolerance: ± 0.050 mm.
 3. The pad layout is for reference purposes only.

CSPB2718-6 Tape (Unit:mm)



raised cross bar 0.03mm

Item	Value&Tolerance
A0	1.95± 0.05
B0	2.90± 0.05
K0	0.30± 0.05
A2	NA
B2	NA
D0	1.50+0.10/0.00
D1	1.00MIN
P0	4.00TYP
P1	4.00TYP
P2	2.00± 0.05
E	1.75± 0.10
F	3.50± 0.05
G	NA
T	0.20± 0.02
W	8.00+0.30/-0.10
M	MAX 3°



Dimensions are in millimeter								
Reel Option	D	D1	D2	G	H	I	W1	W2
7" Dia	Ø180.00	60.00	13.00	R78.00	R25.60	R6.50	8.60	11.40

REEL	Reel Size	Box	Box Size(mm)
3000 pcs	7 inch	30,000 pcs	203×203×195