

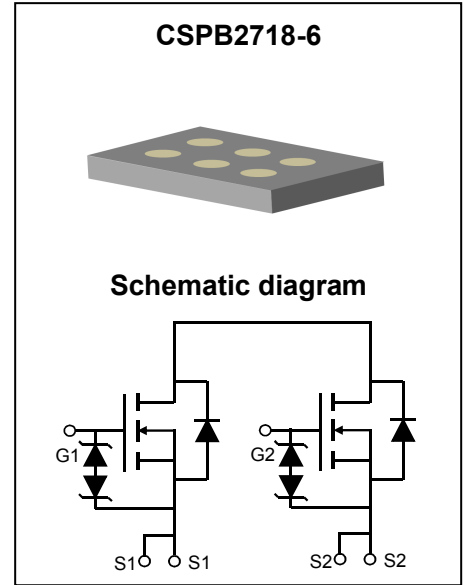


Product Summary

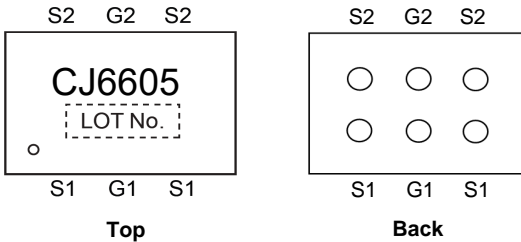
V _{SS}	R _{SS(ON)TYP}	I _S
12V	4.8mΩ@4.5V	13A
	5.0mΩ@4.0V	
	5.2mΩ@3.8V	
	5.7mΩ@3.1V	
	6.5mΩ@2.5V	

Description

The GP6605SP 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:



ABSOLUTE MAXIMUM RATINGS (T_A = 25°C unless otherwise noted)

Parameter	Symbol	Value	Unit
Source - Source Voltage	V _{SS}	12	V
Gate - Source Voltage	V _{GS}	±12	V
Source Current(DC) ¹	I _S	13	A
Source Current (Pulse) ^{1,2}	I _{SM}	60	A
Power Dissipation ³	P _D	2.0	W
Operating Junction and Storage Temperature Range	T _J , T _{STG}	-55 to +150	°C

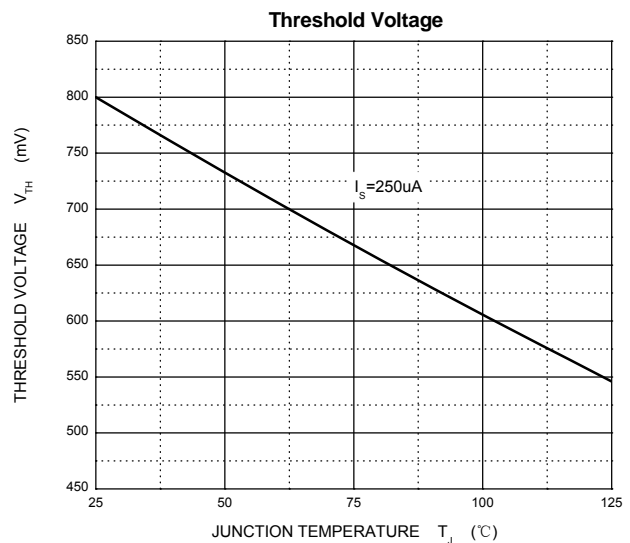
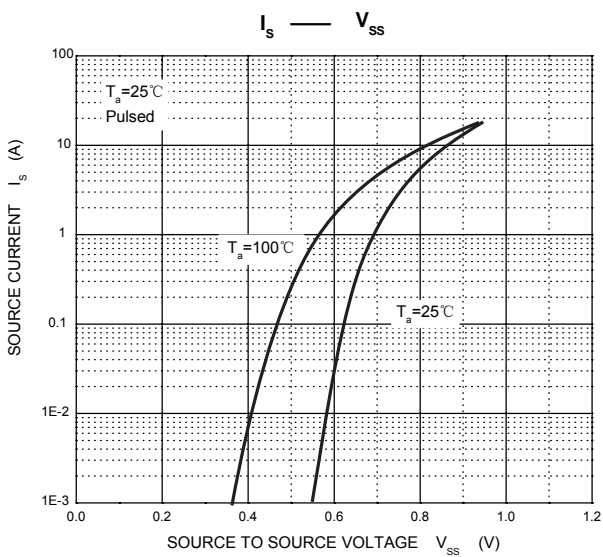
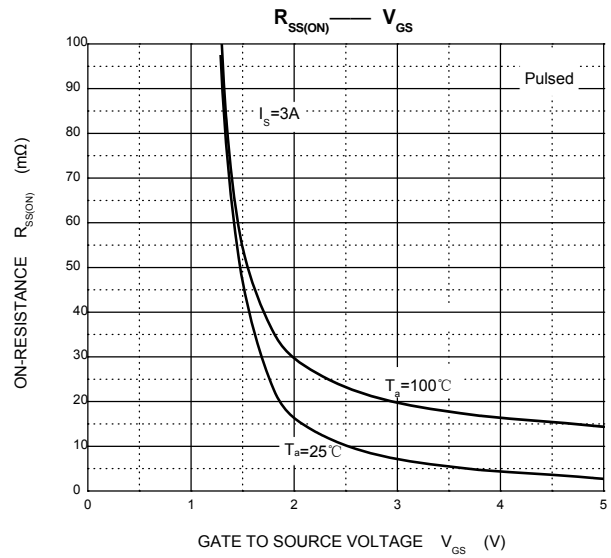
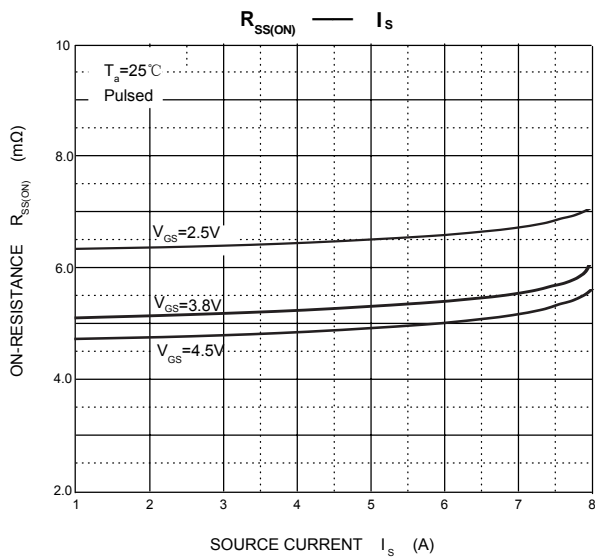
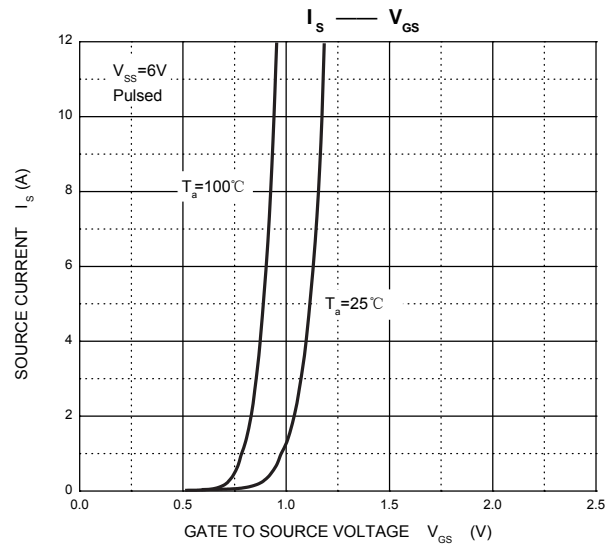
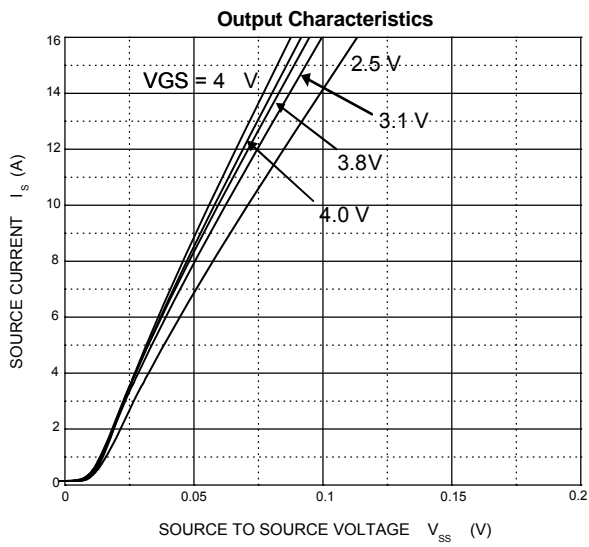
MOSFET ELECTRICAL CHARACTERISTICS ($T_A = 25^\circ\text{C}$ unless otherwise noted)

Parameter	Symbol	Test Condition	Min	Type	Max	Unit
Off Characteristics						
Source - Source Breakdown Voltage	BV_{SSS}	$I_S = 250\mu\text{A}, V_{GS} = 0\text{V}$	12			V
Zero Gate Voltage Source Current	I_{SSS}	$V_{SS} = 8\text{V}, V_{GS} = 0\text{V}$			1	μA
Gate - Source Leakage Current	I_{GSS}	$V_{SS} = 0\text{V}, V_{GS} = \pm 8\text{V}$			± 10	μA
On Characteristics						
Gate Threshold Voltage	$V_{GS(th)}$	$V_{SS} = V_{GS}, I_S = 250\mu\text{A}$	0.4	0.8	1.3	V
Forward Transconductance	g_{FS}	$V_{SS} = 6\text{V}, I_S = 3\text{A}$	6			S
Static Source - Source On-Resistance	$R_{SS(on)}$	$V_{GS} = 4.5\text{V}, I_S = 3\text{A}$	3.0	4.8	7.0	m Ω
		$V_{GS} = 4.0\text{V}, I_S = 3\text{A}$	3.2	5.0	7.5	
		$V_{GS} = 3.8\text{V}, I_S = 3\text{A}$	3.3	5.2	8.0	
		$V_{GS} = 3.1\text{V}, I_S = 3\text{A}$	3.5	5.7	8.5	
		$V_{GS} = 2.5\text{V}, I_S = 3\text{A}$	3.8	6.5	10.0	
Switching Characteristics						
Turn-On Delay Time	$t_{d(on)}$	$V_{SS} = 10\text{V}, V_{GS} = 4.5\text{V}, R_G = 3\Omega,$ $R_L = 3.3\Omega$		3.2		ns
Turn-On Rise Time	t_r			7.8		
Turn-Off Delay Time	$t_{d(off)}$			28		
Turn-Off Fall Time	t_f			25		
Total Gate Charge	Q_g	$V_{SS} = 10\text{V}, I_S = 6\text{A}, V_{GS} = 4.5\text{V}$		36		nC
Source-Source Diode Characteristics						
Forward Source - Source Voltage	V_{FSS}	$V_{GS} = 0\text{V}, I_S = 6\text{A}$			1.2	V

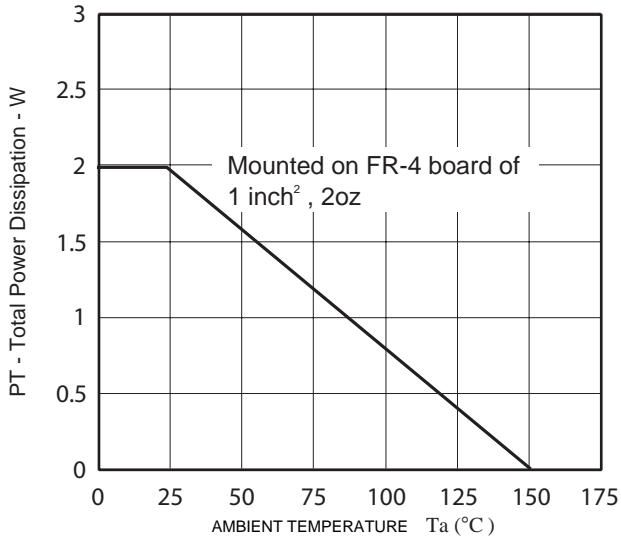
Notes:

1. Device mounted on 1in² FR-4 board with 2oz. Copper, in a still air environment with $T_A = 25^\circ\text{C}$.
2. Pulse Test : Pulse Width $\leq 300\mu\text{s}$, duty cycle $\leq 2\%$.
3. The power dissipation P_T is limited by $T_{J(MAX)} = 150^\circ\text{C}$.

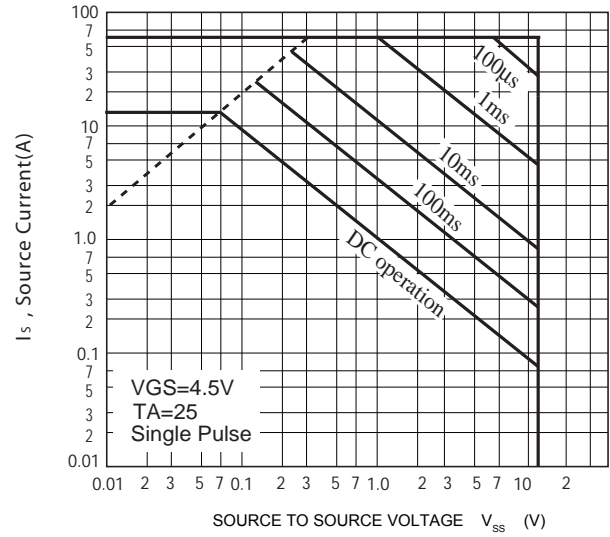
Typical Characteristics



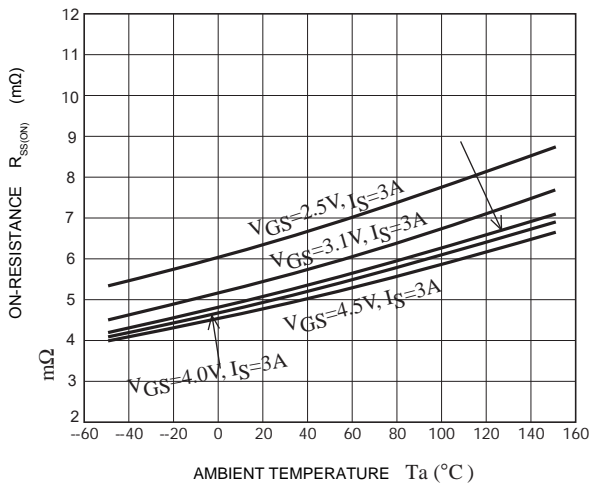
TOTAL POWER DISSIPATION vs. AMBIENT TEMPERATURE



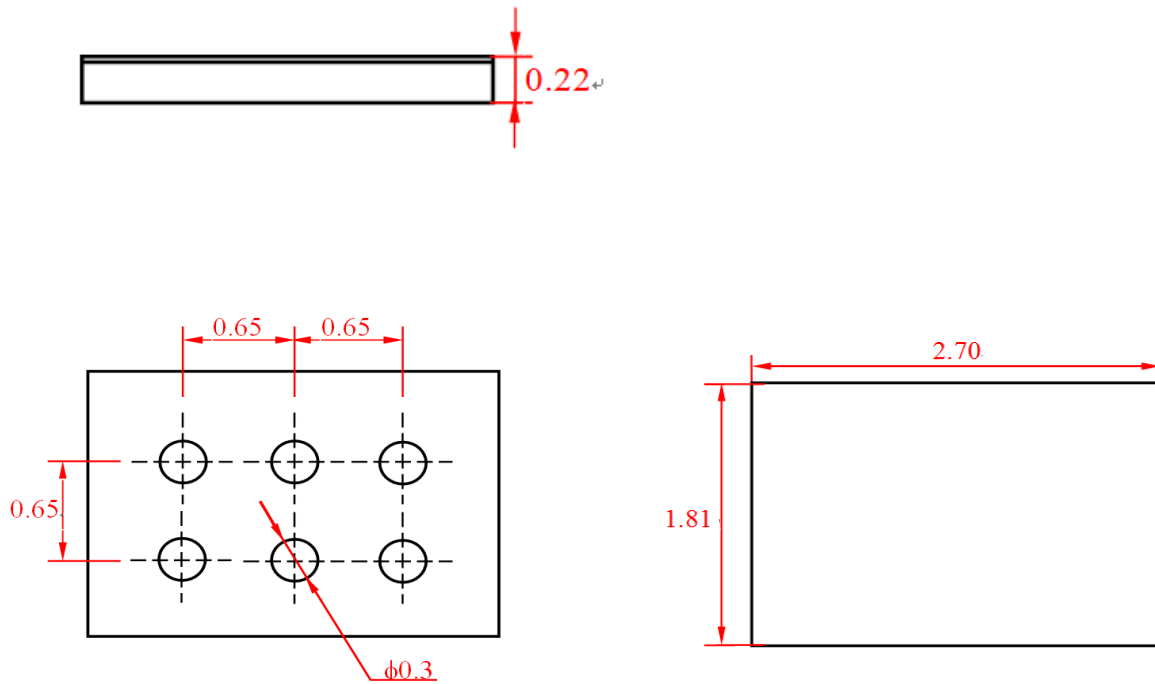
Maximum Safe Operating Area



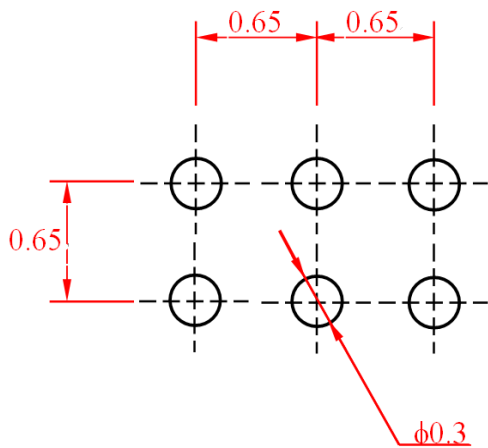
$R_{SS(ON)}$ — T_a



CSPB2718-6 Package Information(Unit:mm)

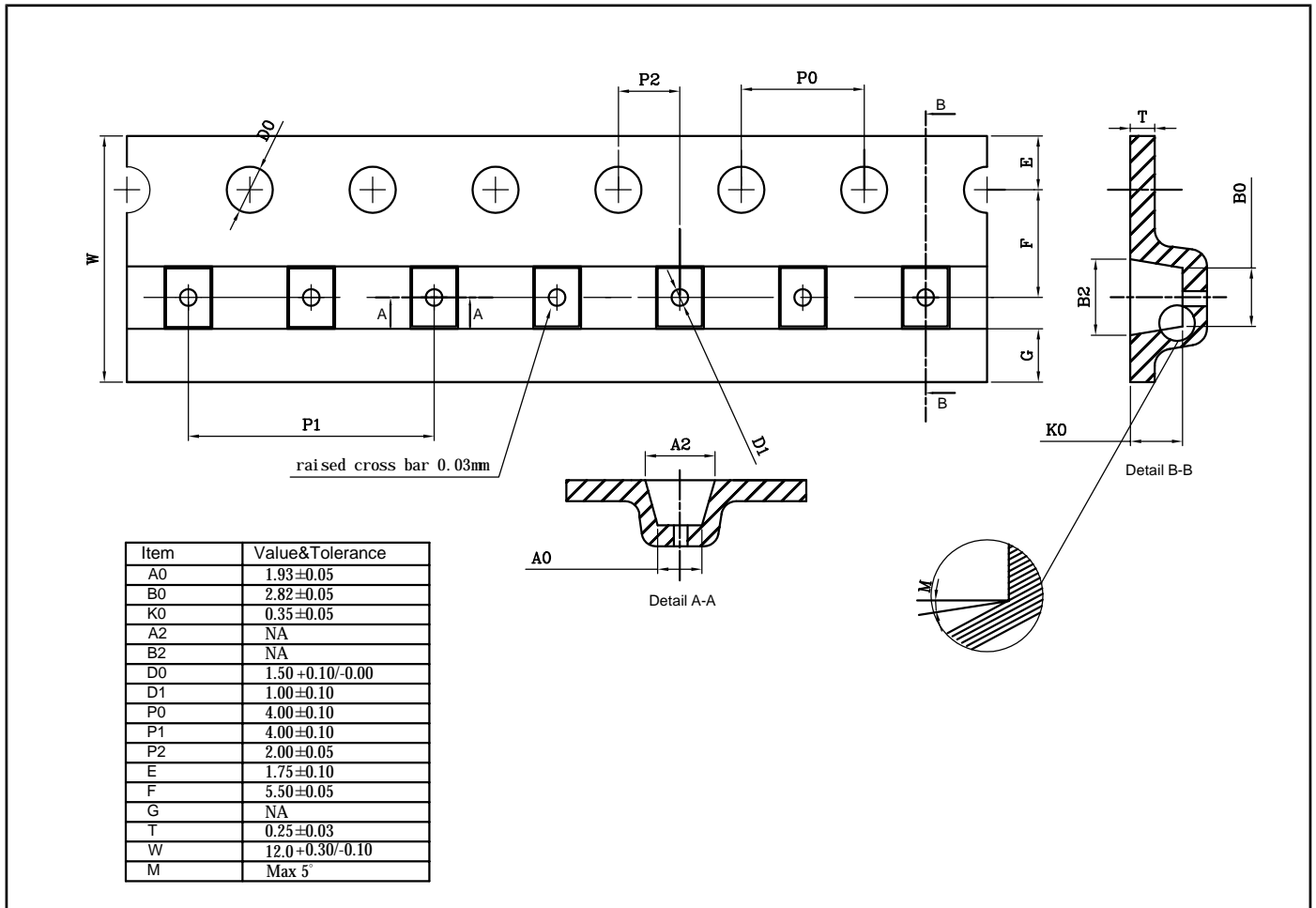


CSPB2718-6 Suggested Pad Layout (Unit:mm)



- 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)



单击下面可查看定价，库存，交付和生命周期等信息

[>>GP\(格瑞宝\)](#)