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TPM2284X6

-60V Dual P-Channel Enhancement Mode MOSFET

www.sot23.com.tw

Features

- Low on-resistance
- High-speed switching
- Drive circuits can be simple
- Parallel use is easy

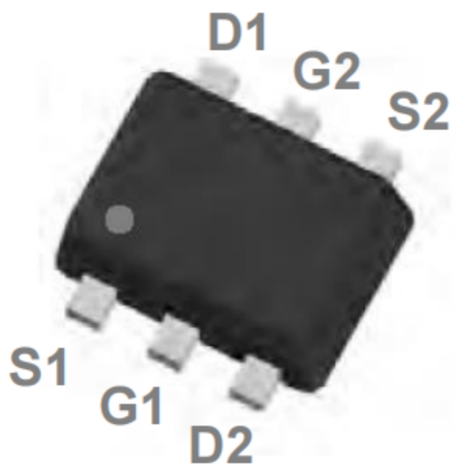
Application

- P-channel enhancement mode effect transistor
- Switching application

Ordering Information

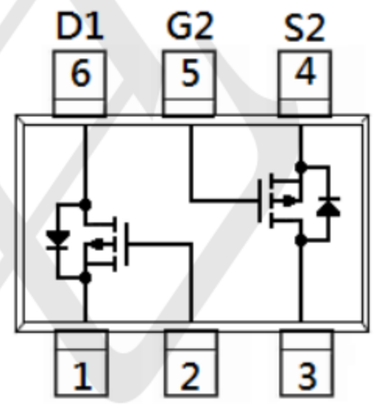
- Package: SOT563
- Shipping Qty:3000/7inch Tape& Reel

Package and Pin Configuration



SOT563

Circuit diagram



Absolute Maximum Ratings (T_A=25℃unless otherwise noted)

Parameter	Symbol	Value	Unit
Drain-Source Voltage	V_{DSS}	-60	V
Gate -Source Voltage	V_{GSS}	±20	V
Continuous Drain Current	I_D	-170	mA
Pulsed Drain Current *4	I_{DM}	-520	mA
Power Dissipation *1	P_D	0.25	W

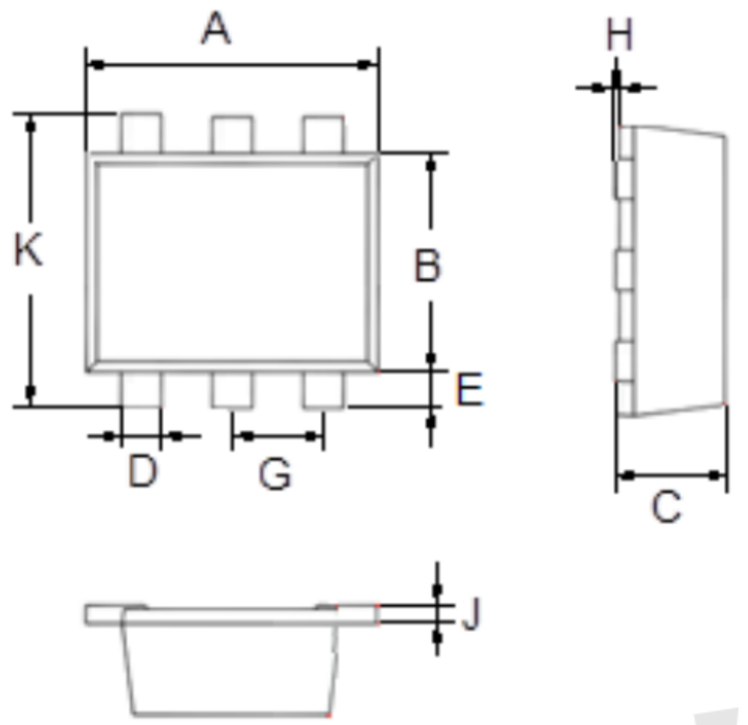
Thermal Characteristic

Parameter	Symbol	Value	Unit
Thermal Resistance Junction-to-Air *1	$R_{\theta JA}$	500	°C/W
Thermal Resistance Junction-to-Case *1	$R_{\theta JC}$	342	°C/W
Thermal Resistance Junction-to-Lead *1	$R_{\theta JL}$	280	°C/W
Operating Junction Temperature Range	T_J	-55 ~ +150	°C
Storage Temperature Range	T_{STG}	-55 ~ +150	°C

Electrical Characteristics (T_A = 25°C unless otherwise noted)

Symbol	Parameter	Test Condition	Min.	Typ.	Max.	Unit
Static Characteristics						
V_{DSS}	Drain-Source Breakdown Voltage	V_{GS} = 0V, I_D = -250μA	-60	-	-	V
I_{DSS}	Drain to Source Leakage Current	V_{DS} = -60V, V_{GS} = 0V	-	-	-1	μA
I_{GSS}	Gate-body Leakage	V_{GS} = ±20V, V_{DS} = 0V	-	-	±10	μA
On Characteristics *2						
$R_{DS(ON)}$	Static Drain-Source On-resistance	V_{GS} = -5V, I_D = -0.1A	-	4	8	Ω
		V_{GS} = -10V, I_D = -0.13A	-	3.5	6	Ω
$V_{GS(TH)}$	Gate Threshold Voltage	V_{DS} = V_{GS}, I_D = -250μA	-1	-1.7	-3	V
Dynamic Characteristics *3						
C_{ISS}	Input Capacitance	V_{GS} = 0V V_{DS} = -20V f = 1.0MHz	-	32	-	pF
C_{OSS}	Output Capacitance		-	16	-	
C_{RSS}	Reverse Transfer Capacitance		-	4	-	
R_G	Gate Resistance	V_{GS} = 0V, V_{DS} = -15mV f = 1.0MHz	-	945	-	Ω
Source-Drain Diode Characteristics						
V_{SD}	Diode Forward Voltage *2	I_S = 0.26A, V_{GS} = 0V	-	-0.8	-1.4	V
I_S	Diode Continuous Forward Current	T_C=25°C	-	-	-0.3	A

Package Outline Dimensions SOT563 (Unit: mm)



SOT-563		
Dimension	**Min.**	**Max.**
A	1.500	1.700
B	1.100	1.300
C	0.525	0.600
D	0.170	0.270
E	0.100	0.300
G	0.450	0.550
H	0.000	0.050
J	0.090	0.160
K	1.500	1.700

Suggested Pad Layout

