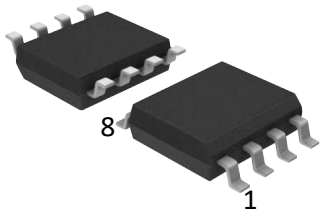
PJM204A5DPPA
Dual P-Enhancement Field Effect Transistor

Features

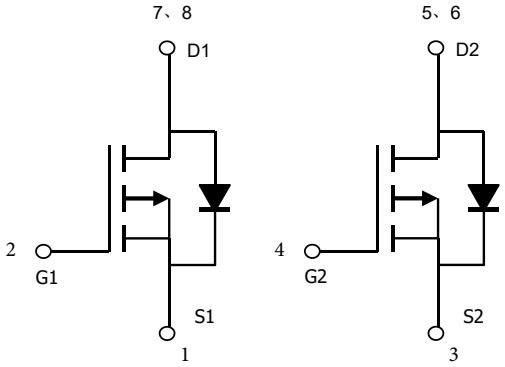
- Dual P-channel MOSFET
- Super high dense cell design
- Rugged and reliable
- V_{DS}=-20V, I_D=-4.5A
  $R_{DS(on)}$=65mΩ(Max)@V_{GS}=-10V

SOP-8



Application

- Power management in laptops
- Portable equipment
- Battery powered systems.



Absolute Maximum Ratings

Ratings at 25℃ ambient temperature unless otherwise specified.

Parameter		Symbol	Value	Unit
Drain-Source Voltage		V_{DS}	−20	V
Gate-Source Voltage		V_{GS}	± 12	V
Continuous Drain Current Note 1		I_D	−4.5	A
Pulsed Drain Current Note 1		I_{DM}	−20	A
Diode Continuous Forward Current Note 1		I_S	-2.0	A
Total Power Dissipation Note 1 (Single Operation)	T_A=25℃	P_D	2	W
	T_A=100℃		0.8	
Operating Junction Temperature		T_J	150	℃
Storage Temperature		T_{STG}	- 55 to + 150	℃

Thermal Characteristics

Parameter	Symbol	Value	Units
Maximum Junction-to-Ambient Note 1	$R_{\theta JA}$	62.5	℃/W

Note:1. Surface Mounted on 1 in.^{2} pad area, t ≤ 10sec.

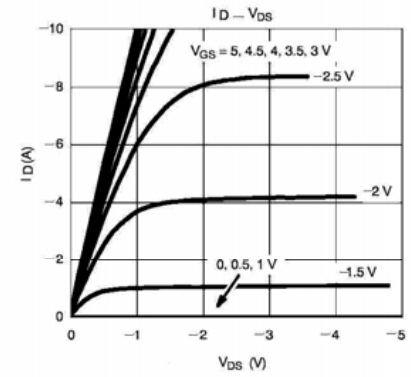
Electrical Characteristics

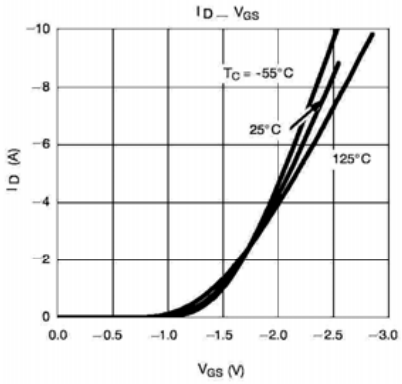
Ratings at 25℃ ambient temperature unless otherwise specified.

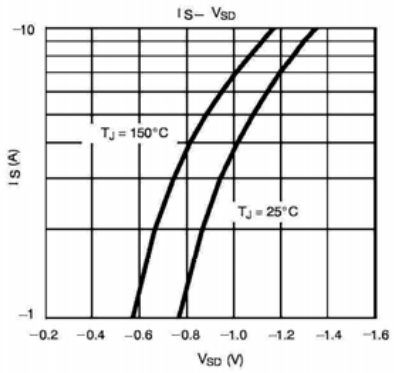
Parameter	Symbol	Test Conditions		Min	Typ	Max	Unit
Static Characteristics							
Drain-to-Source Breakdown Voltage	$V_{(BR)DS}$	V_{GS} = 0 V, I_D = -250uA		-20	-	-	V
Zero Gate Voltage Drain Current	I_{DSS}	V_{DS} =-16 V, V_{GS} = 0V	T_A=25℃	-	-	-1	uA
			T_J=85℃			-10	
Gate-to-source Leakage Current	I_{GSS}	V_{DS} = 0 V, V_{GS} = ±12V				±100	nA
Gate Threshold Voltage	$V_{GS(th)}$	V_{GS} = V_{DS}, I_D = -250uA		-0.55	-0.8	-1.4	V
Drain-to-source On-resistance Note 1	$R_{DS(on)}$	V_{GS} = -10V, I_D = -4.5A		-	52	65	mΩ
		V_{GS} = -4.5V, I_D = -3.5A		-	68	78	
		V_{GS} = -2.5V, I_D = -2.2A		-	88	98	
Dynamic Characteristics Note 2							
Input Capacitance	C_{iss}	V_{GS} = 0 V, f = 1.0 MHz, V_{DS} = -6 V		-	415	-	pF
Output Capacitance	C_{oss}			-	223	-	
Reverse Transfer Capacitance	C_{rss}			-	84	-	
Total Gate Charge	Qg	V_{DS} =-6V, V_{GS} =-4.5V, I_D =-2.7A		-	5.8	-	nC
Gate-Source Charge	Qgs			-	0.85	-	
Gate-Drain Charge	Qgd			-	1.7	-	
Turn-On Delay Time	td(on)	V_{DD} =-6V, I_D=-1.0A, R_{GEN} =6Ω, V_{GEN} = -10V,		-	13	25	ns
Turn-On Rise Time	tr			-	36	60	
Turn-Off Delay Time	td(off)			-	42	70	
Turn-Off Fall Time	tf			-	34	60	
Source-Drain Diode characteristics							
Body Diode Voltage Note 1	V_{SD}	I_S=-1.0A, V_{GS}=0V			-0.7	-1.3	V

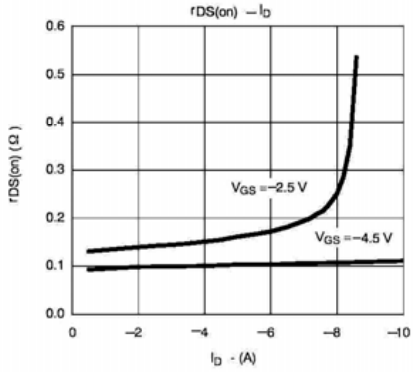
Note: 1. Pulse Test: Pulse Width≤300 μs, Duty Cycle≤2 %.
2. Guaranteed by design, not subject to production testing.

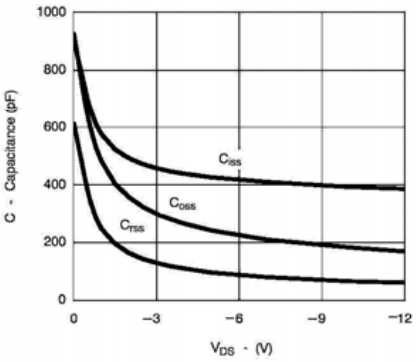
Ratings and Characteristic Curves

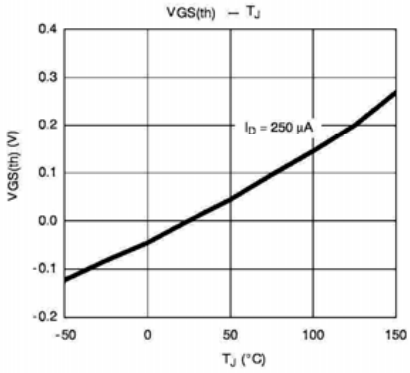


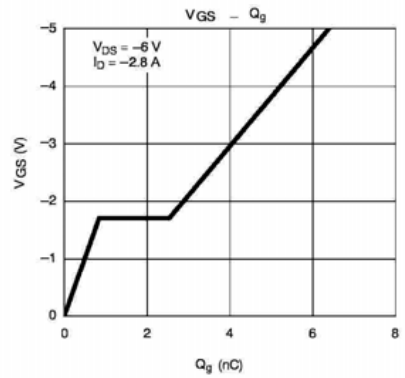


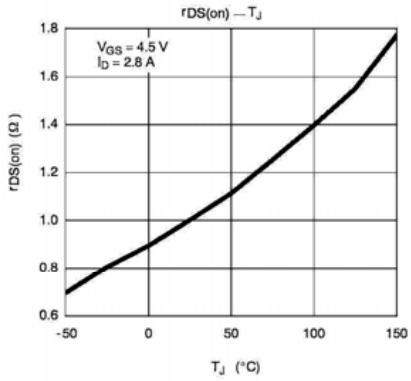


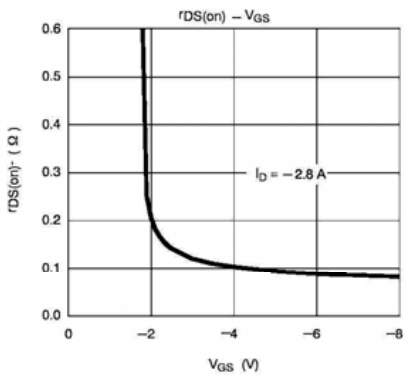


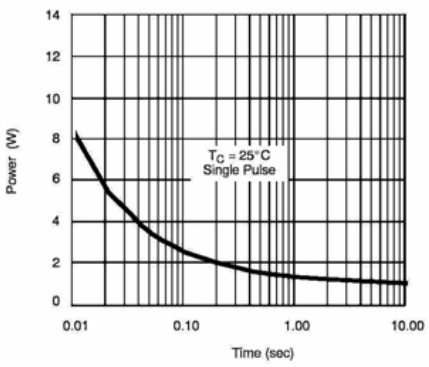








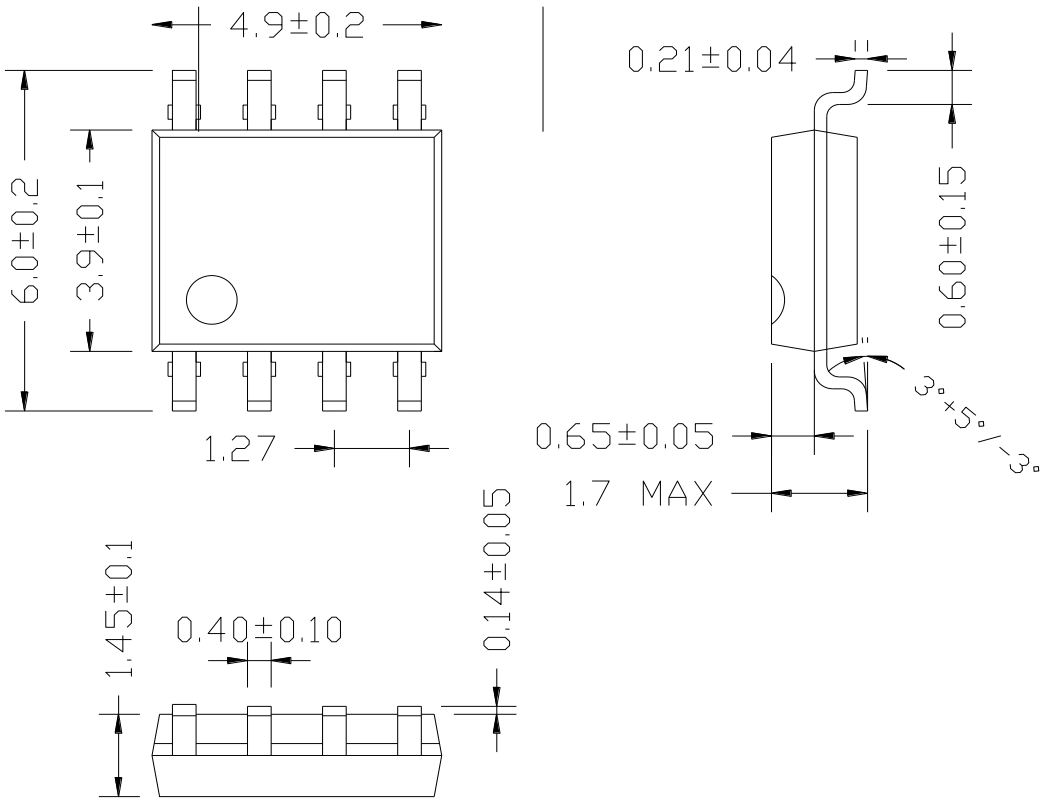




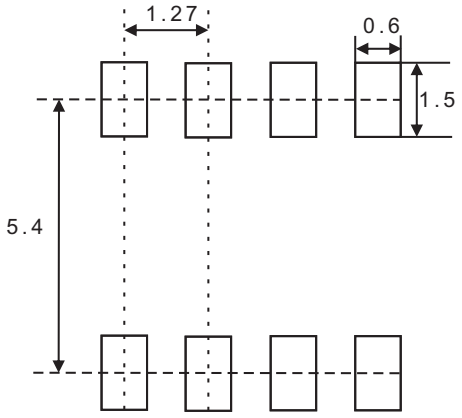
Package Outline

SOP-8

unit: mm



Recommended soldering pad



unit: mm

Ordering Information

Device	Package	Shipping
PJM204A5DPPA	SOP-8	4,000PCS/T&R(13 inch)