



SPP7465

P-Channel Enhancement Mode MOSFET

DESCRIPTION

The SPP7465 is the P-Channel logic enhancement mode power field effect transistors are produced using high cell density , DMOS trench technology.

This high density process is especially tailored to minimize on-state resistance.

These devices are particularly suited for low voltage application , notebook computer power management and other battery powered circuits where high-side switching .

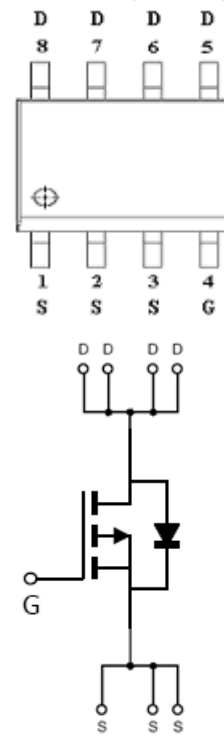
FEATURES

- ◆ -60V/-8A, $R_{DS(ON)}=90m\Omega@V_{GS}=-10V$
- ◆ -60V/-6A, $R_{DS(ON)}=100m\Omega@V_{GS}=-4.5V$
- ◆ Super high density cell design for extremely low $R_{DS(ON)}$
- ◆ Exceptional on-resistance and maximum DC current capability
- ◆ SOP-8 package design

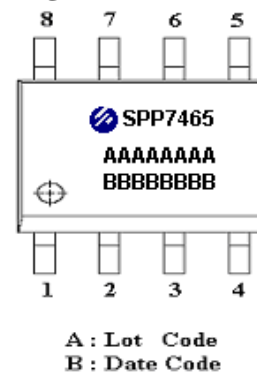
APPLICATIONS

- Power Management in Note book
- Portable Equipment
- Battery Powered System
- DC/DC Converter
- Load Switch
- DSC
- LCD Display inverter

PIN CONFIGURATION(SOP-8)



PART MARKING





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PIN DESCRIPTION

Pin	Symbol	Description
1	S	Source
2	S	Source
3	S	Source
4	G	Gate
5	D	Drain
6	D	Drain
7	D	Drain
8	D	Drain

ORDERING INFORMATION

Part Number	Package	Part Marking
SPP7465S8RGB	SOP-8	SPP7465

※ SPP7465S8RGB 13" Tape Reel ; Pb – Free ; Halogen – Free

ABSOLUTE MAXIMUM RATINGS

(TA=25°C Unless otherwise noted)

Parameter	Symbol	Typical	Unit
Drain-Source Voltage	V _{DSS}	-60	V
Gate –Source Voltage	V _{GSS}	±20	V
Continuous Drain Current(T _J =150°C)	I _D	-8	A
		-6	
Pulsed Drain Current	I _{DM}	-30	A
Continuous Source Current(Diode Conduction)	I _S	-2.3	A
Power Dissipation	P _D	2.8	W
		1.8	
Operating Junction Temperature	T _J	-55/150	°C
Storage Temperature Range	T _{STG}	-55/150	°C
Thermal Resistance-Junction to Ambient	R _{θJA}	70	°C/W



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ELECTRICAL CHARACTERISTICS

(T_A=25°C Unless otherwise noted)

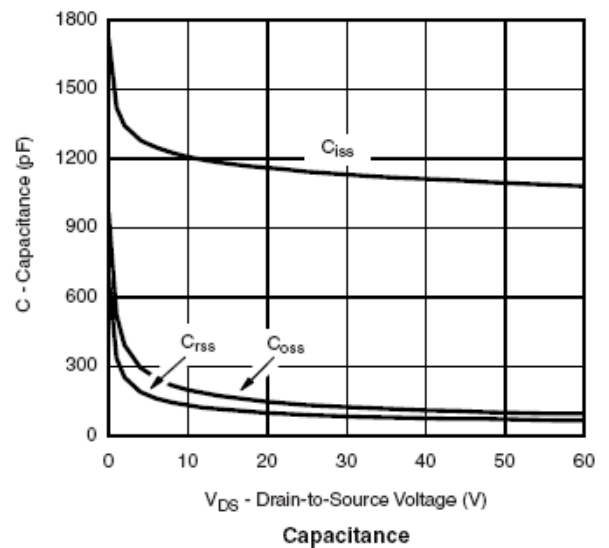
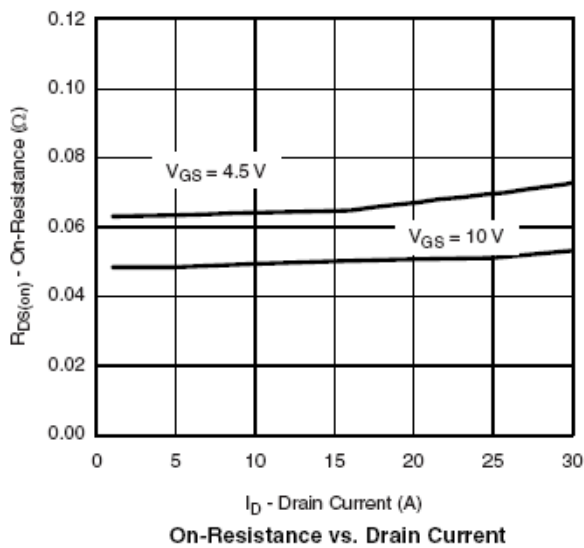
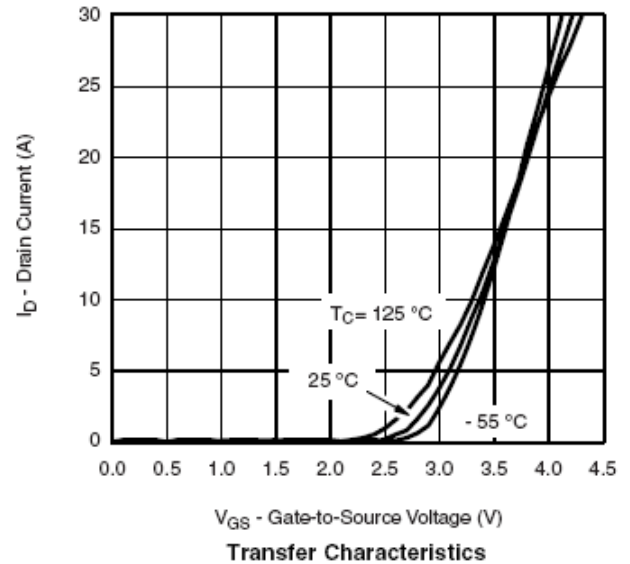
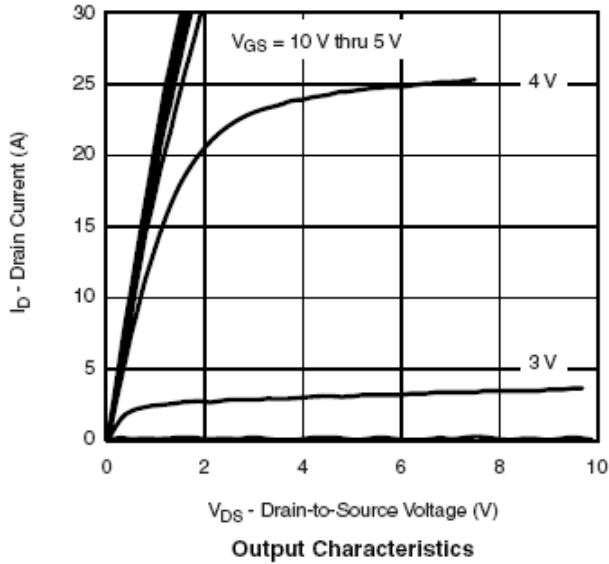
Parameter	Symbol	Conditions	Min.	Typ	Max.	Unit
Static						
Drain-Source Breakdown Voltage	V _{(BR)DSS}	V _{GS} =0V, I _D =-250uA	-60			V
Gate Threshold Voltage	V _{GS(th)}	V _{DS} =V _{GS} , I _D =-250uA	-0.8		-3.0	
Gate Leakage Current	I _{GSS}	V _{DS} =0V, V _{GS} =±20V			±100	nA
Zero Gate Voltage Drain Current	I _{DSS}	V _{DS} =-48V, V _{GS} =0V			-1	uA
		V _{DS} =-48V, V _{GS} =0V T _J =55°C			-10	
On-State Drain Current	I _{D(on)}	V _{DS} = -5V, V _{GS} = -10V	-25			A
Drain-Source On-Resistance	R _{DS(on)}	V _{GS} =-10V, I _D =-8A		75	90	mΩ
		V _{GS} =-4.5V, I _D =-6A		85	100	
Forward Transconductance	g _{fs}	V _{DS} =-15V, I _D =-5A		16		S
Diode Forward Voltage	V _{SD}	I _S =-2.9A, V _{GS} =0V		-0.8	-1.2	V
Dynamic						
Total Gate Charge	Q _g	V _{DS} =-30V, V _{GS} =-10.0V I _D = -5.0A		30	45	nC
Gate-Source Charge	Q _{gs}			7		
Gate-Drain Charge	Q _{gd}			10		
Input Capacitance	C _{iss}	V _{DS} =-30V, V _{GS} =0V f=1MHz		1800		pF
Output Capacitance	C _{oss}			250		
Reverse Transfer Capacitance	C _{rss}			245		
Turn-On Time	t _{d(on)}	V _{DD} =-30V, R _L =30Ω I _D =-1.0A, V _{GEN} =-10.0V R _G =6Ω		9	20	nS
	t _r			9	20	
Turn-Off Time	t _{d(off)}			60	90	
	t _f			35	50	



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TYPICAL CHARACTERISTICS

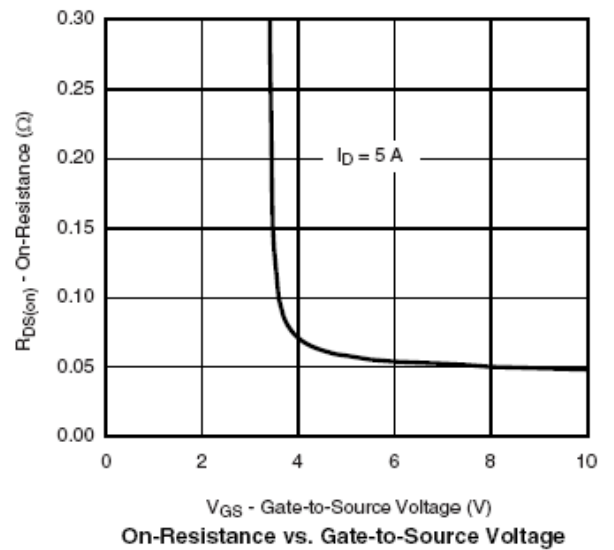
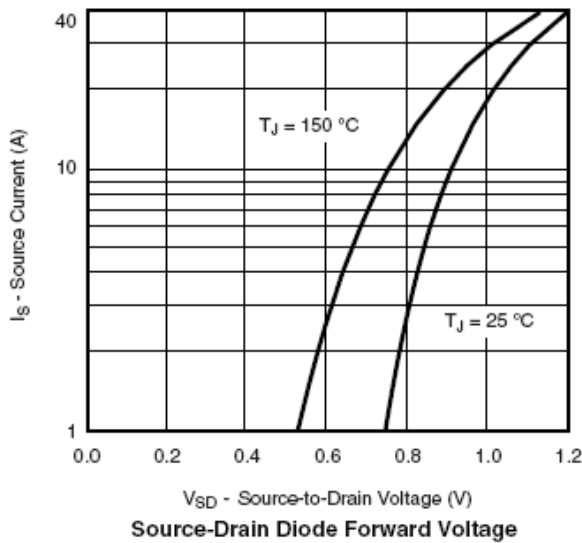
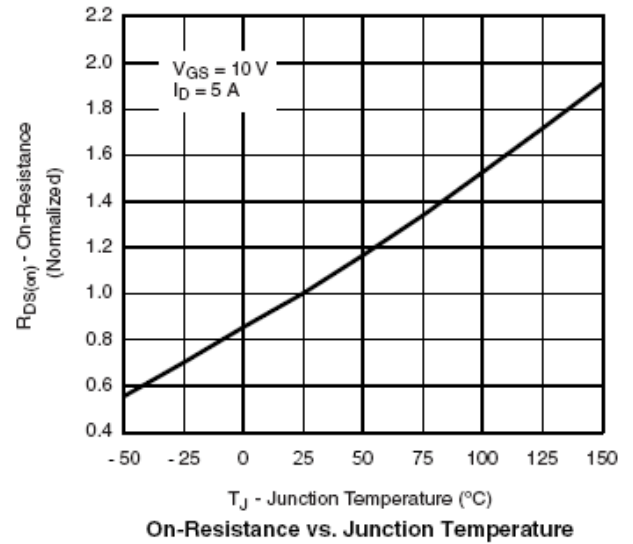
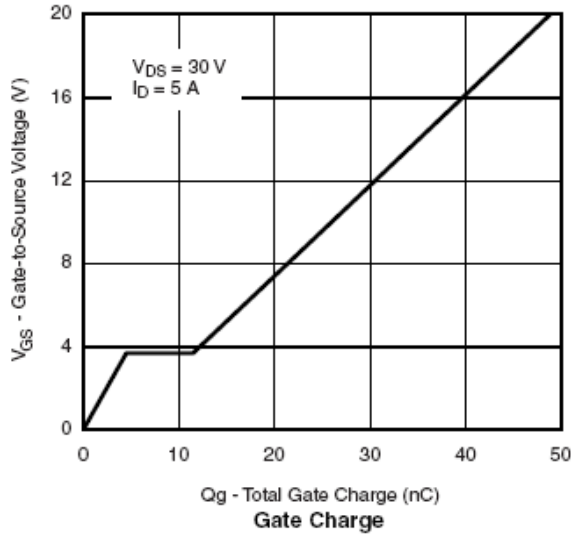




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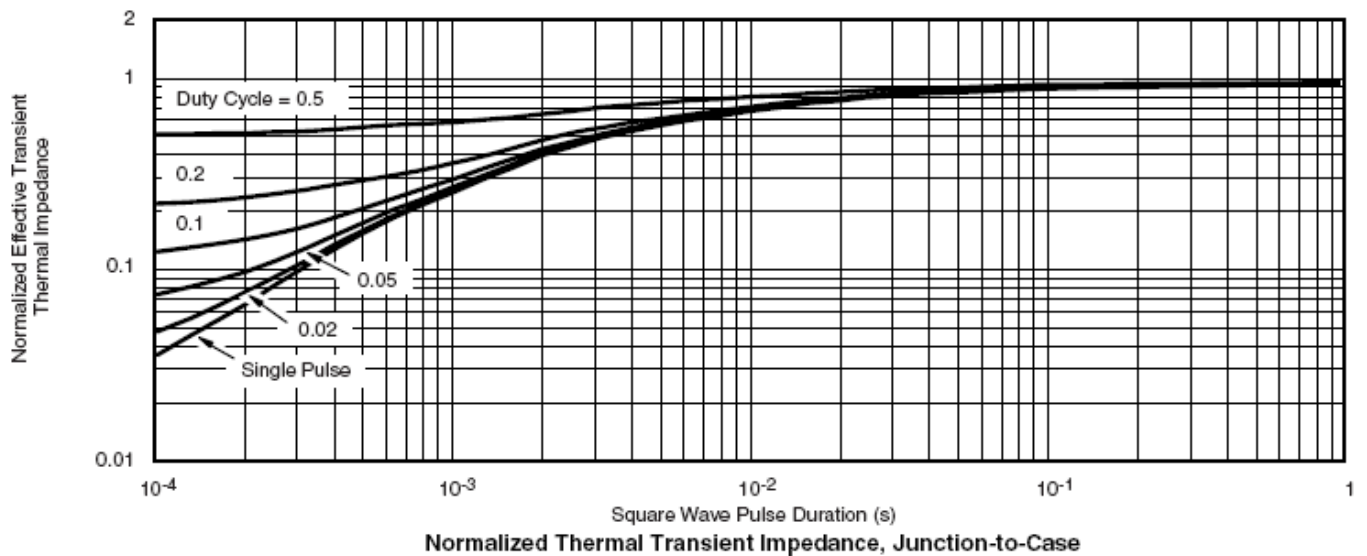
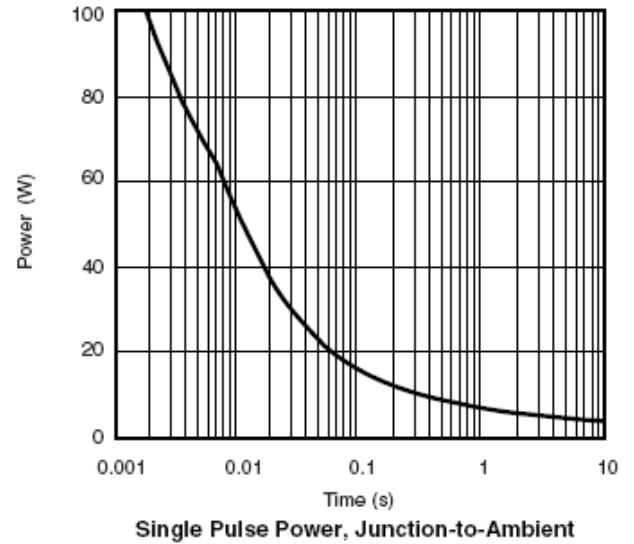
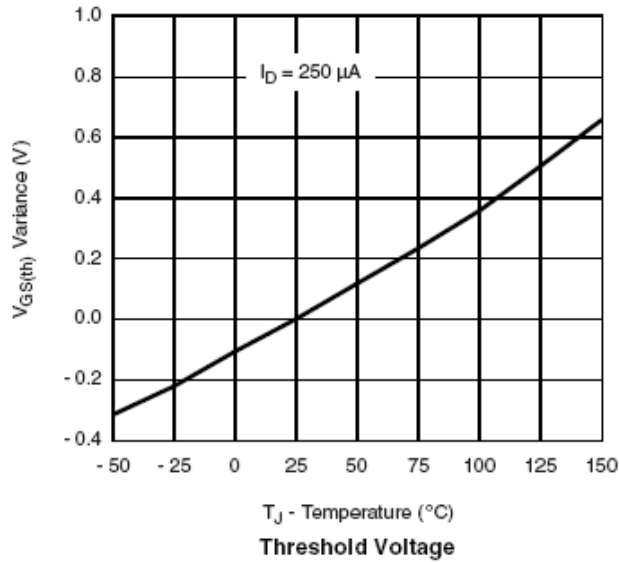




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TYPICAL CHARACTERISTICS





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