

PDFN3×3A-8L P MOS

P-Channel Enhancement Mode Field Effect Transistor in a PDFN3×3A-8L Plastic Package.

$V_{DS} (V) = -40V$ $I_D = -20.5 A$ ($V_{GS} = \pm 20V$)

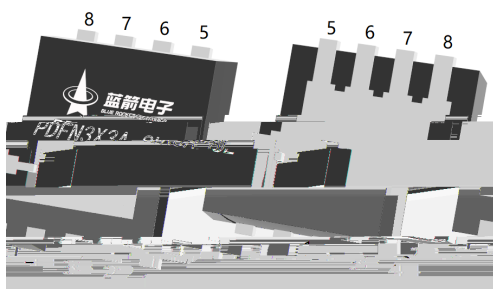
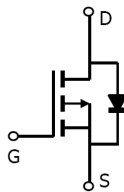
$R_{DS(ON)}@10V \leq 35m\Omega$ (Typ. 33mΩ)

$R_{DS(ON)}@4.5V \leq 60m\Omega$ (Typ. 43mΩ)

HF Product.

DC/DC

These devices are well suited for high efficiency switching DC/DC converters and switch mode power supplies.

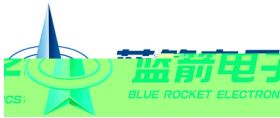


出脚	定义
Pin1	S
Pin2	S
Pin3	S
Pin4	G
Pin5	D
Pin6	D
Pin7	D
Pin8	D

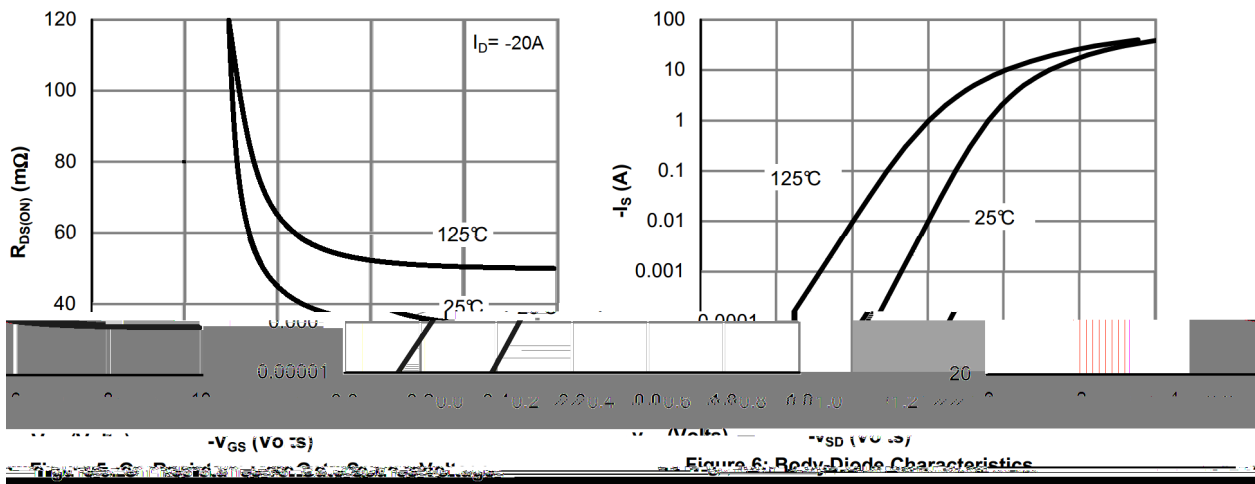
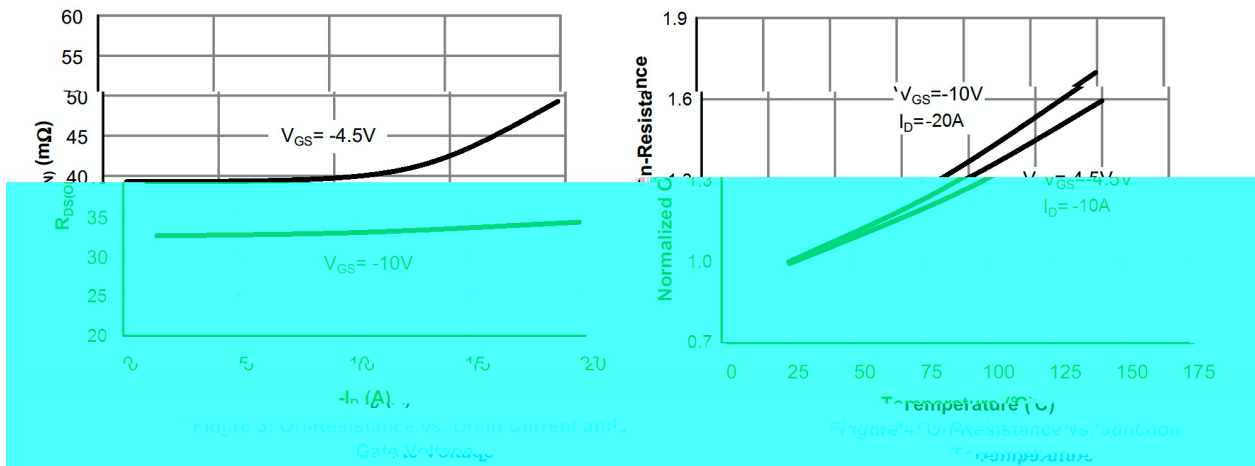
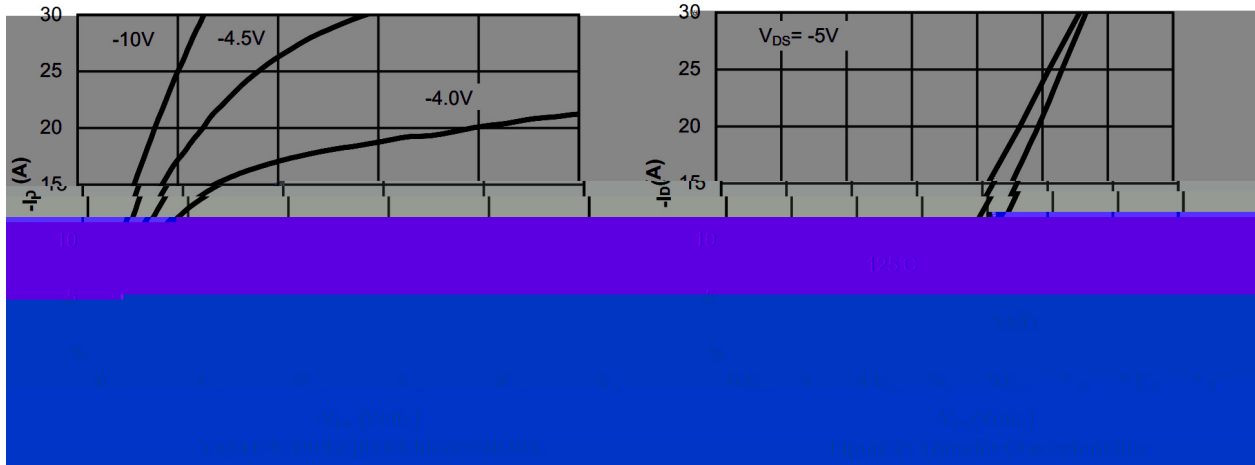
See Marking Instructions.

Parameter		Symbol	Rating	Unit
Drain-Source Voltage		V_{DS}	-40	V
Drain Current		$I_D(T_c=25^\circ\text{C})$	-20.5	A
Drain Current - Pulsed		I_{DM}	-65	A
Gate-Source Voltage		V_{GS}	± 20	V
Avalanche Current		I_{AS}	-17	A
Single Pulsed Avalanche Energy $L=0.5\text{mH}$		E_{AS}	144.5	mJ
Power Dissipation		$P_D(T_c=25^\circ\text{C})$	25	W
Storage Temperature Range		T_{stg}	-55 ~ 150	
Thermal Resistance-Junction to Ambient	$t \leq 10\text{s}$	$R_{\theta JA}$	30	/W
	Steady-State		75	
Thermal Resistance-Junction to Case	Steady-State	$R_{\theta JC}$	5	

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Drain-Source Breakdown Voltage	BV_{DS}	$V_{GS}=0\text{V}$ $I_D=-250\mu\text{A}$	-40	-46		V
Zero Gate Voltage Drain Current	I_{DSS}	$V_{DS}=-40\text{V}$ $V_{GS}=0\text{V}$			1.0	μA
Gate-Body Leakage Current Forward	I_{GSS}	$V_{GS}=\pm 20\text{V}$ $V_{DS}=0\text{V}$			± 0.1	μA
Gate Threshold Voltage	$V_{GS(th)}$	$V_{DS}=V_{GS}$ $I_D=-250\mu\text{A}$	-1.0	-1.4	-2.5	V
Static Drain-Source On-Resistance	$R_{DS(on)}$	$V_{GS}=-10\text{V}$ $I_D=-20\text{A}$		33	35	m Ω
		$V_{GS}=-4.5\text{V}$ $I_D=-10\text{A}$		40	60	
Drain-Source Diode Forward Voltage	V_{SD}	$V_{GS}=0\text{V}$ $I_S=-1\text{A}$			-1.2	V
Gate resistance	R_g	$V_{GS}=0\text{V}$ $V_{DS}=0\text{V}$, $f=1\text{MHz}$		9.5		Ω
Input Capacitance	C_{iss}	$V_{DS}=-25\text{V}$ $V_{GS}=0\text{V}$ $f=1.0\text{MHz}$		1500		pF
Output Capacitance	C_{oss}			620		
Reverse Transfer Capacitance	C_{rss}			440		
Total Gate Charge	$Q_{g(-10V)}$	$V_{GS}=-10\text{V}$ $V_{DS}=-20\text{V}$ $I_D=-12\text{A}$		16.5		nC
Total Gate Charge	$Q_{g(-4.5V)}$			7.8		
Gate Source Charge	Q_{gs}			4.2		
Gate Drain Charge	Q_{gd}			3.8		



Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
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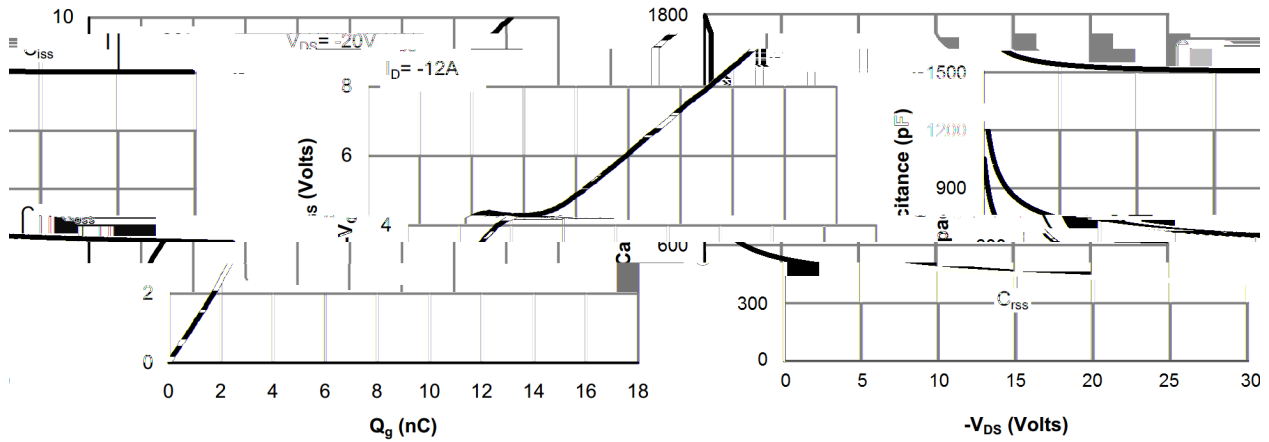
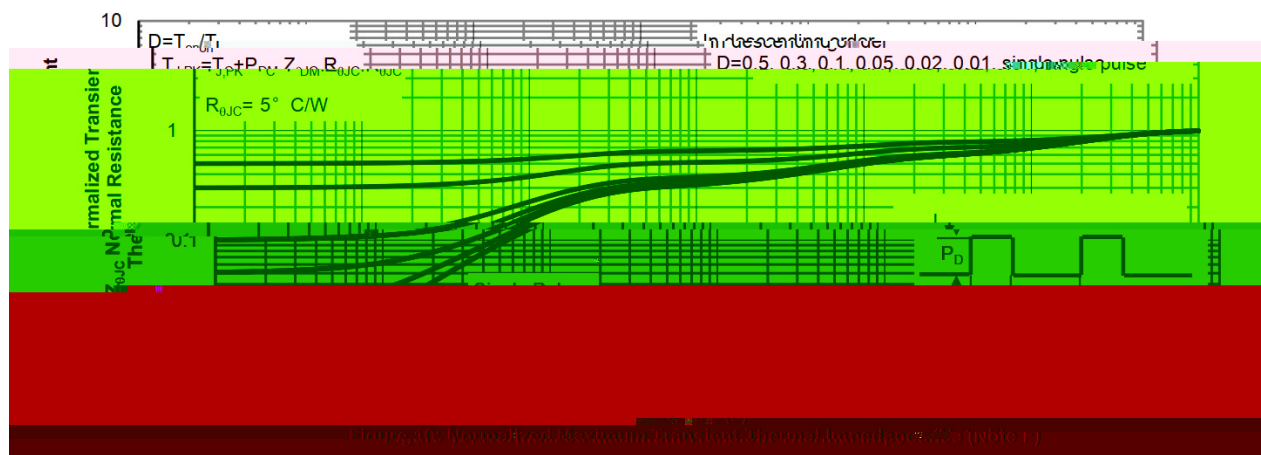
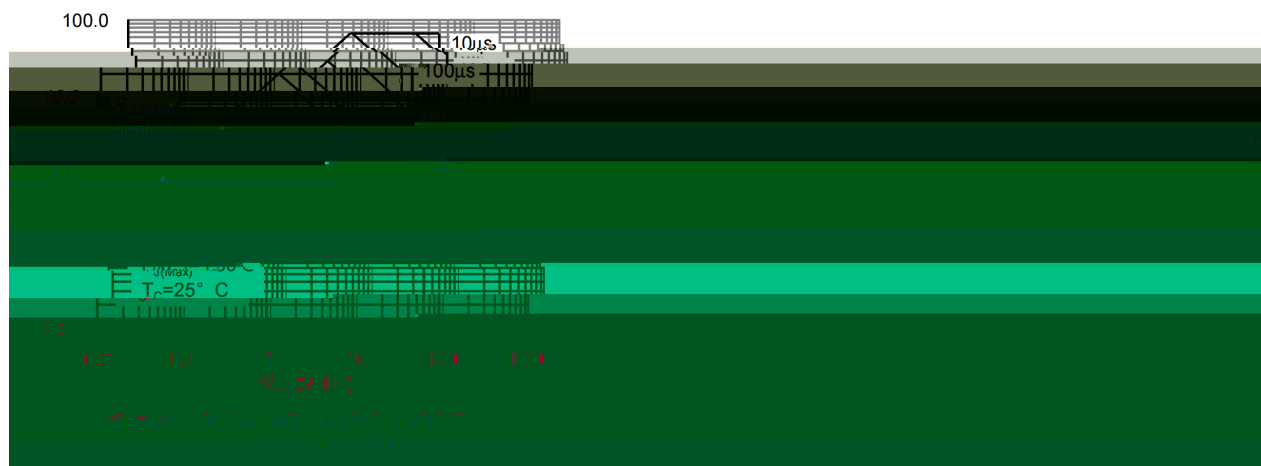
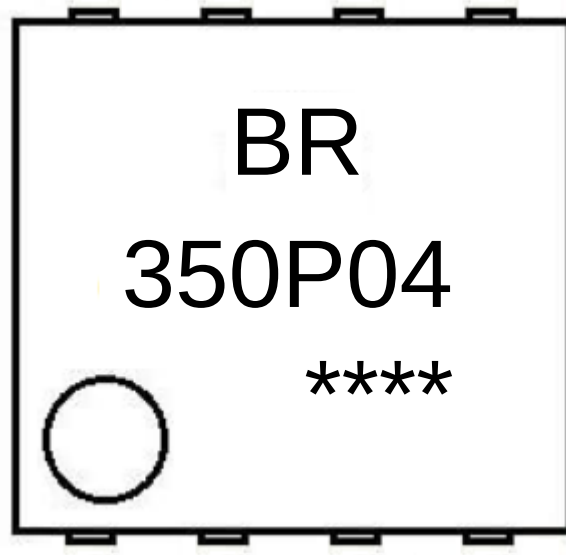


Figure 7: Gate-Charge Characteristics

Figure 8: Capacitance Characteristics





BR

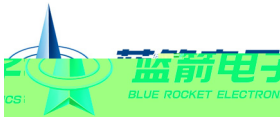
350P04

Note:

BR: Company Code

350P04: Product Type Code

****: Lot No. Code, code change with Lot No



Temperature Profile for IR Reflow Soldering(Pb-Free)

- 1

150 180

60 90sec;
- 2

245±5

5±0.5sec;
- 3

2 10

/sec.
- Note:

1.Preheating:150~180 , Time:60~90sec.

2.Peak Temp.:245±5 , Duration:5±0.5sec.

3. Cooling Speed: 2~10 /sec.

260±5 ≡ ≡