

BRCS350P04YB

Rev.A Mar.-2025

/ Descriptions

PDFN 3× 3A -8L P MOS

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

/ Features

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

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

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

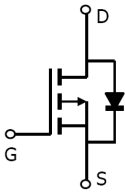
HF Product.

/ Applications

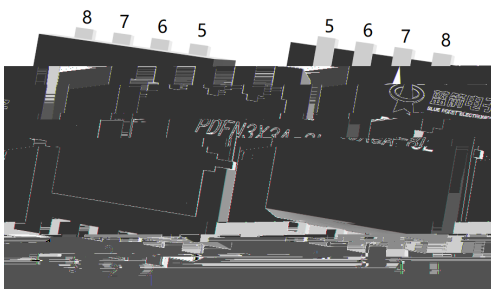
DC/DC

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

/ Equivalent Circuit



/ Pinning



出脚	定义
Pin1	S
Pin2	C
Pin3	S
Pin4	S
Pin5	S
Pin6	S
Pin7	S
Pin8	S

/ Marking

See Marking Instructions.

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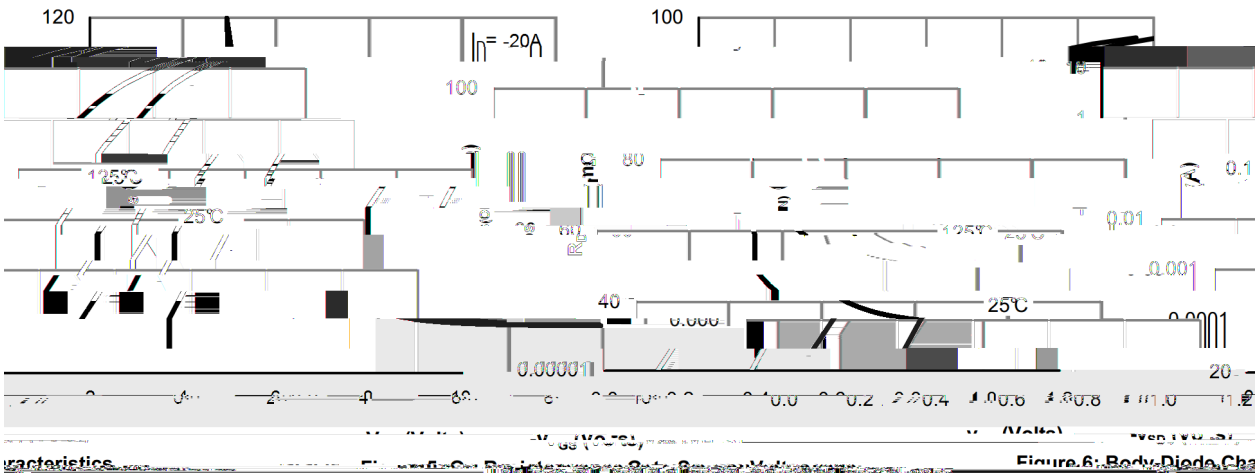
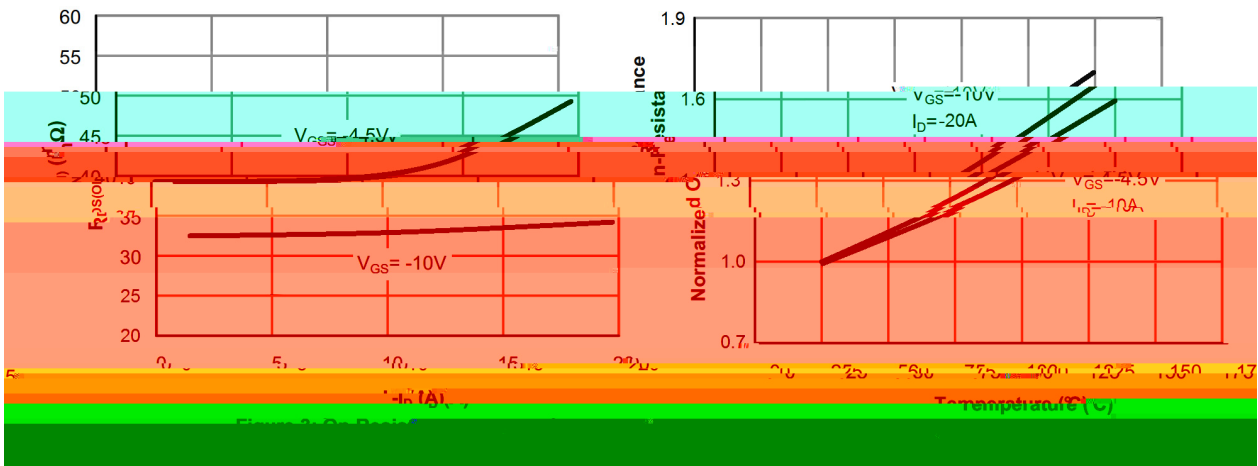
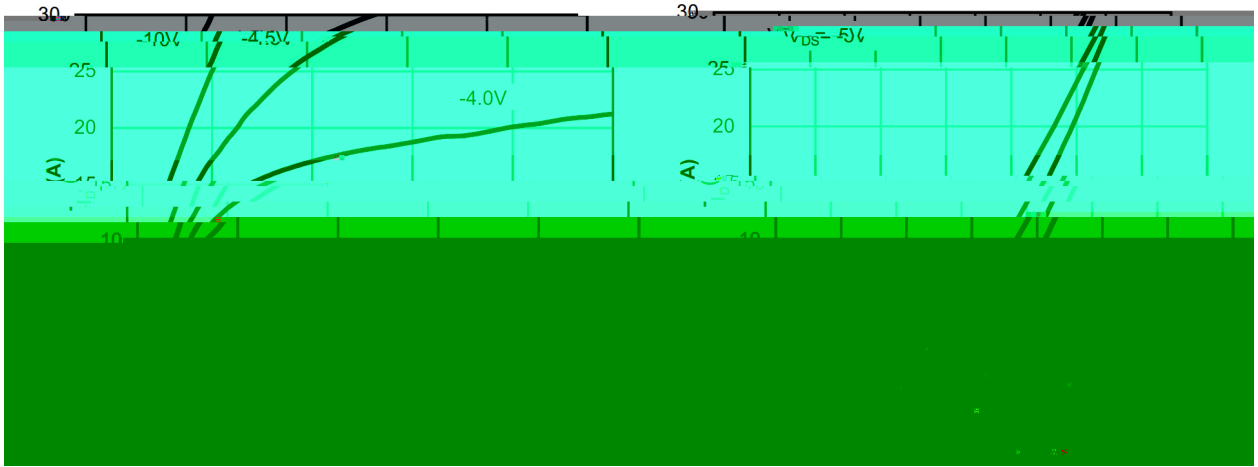
DATA SHEET

Parameter		Symbol	Rating	Unit
Drain-Source Voltage		V_{DSS}	-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_{JA}	30	/W
	Steady-State		75	
Thermal Resistance-Junction to Case	Steady-State	R_{JC}	5	

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Drain-Source Breakdown Voltage	BV_{DSS}	$V_{GS}=0\text{V}$ $I_D=-250\mu\text{A}$	-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
		$V_{GS}=-4.5\text{V}$ $I_D=-10\text{A}$		40	60	
Drain-Source Diode Forward Voltage	V_{SD}	$V_{GS}=0\text{V}$ $I_S=-1\text{A}$		=0V		

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
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/ Electrical Characteristic Curve

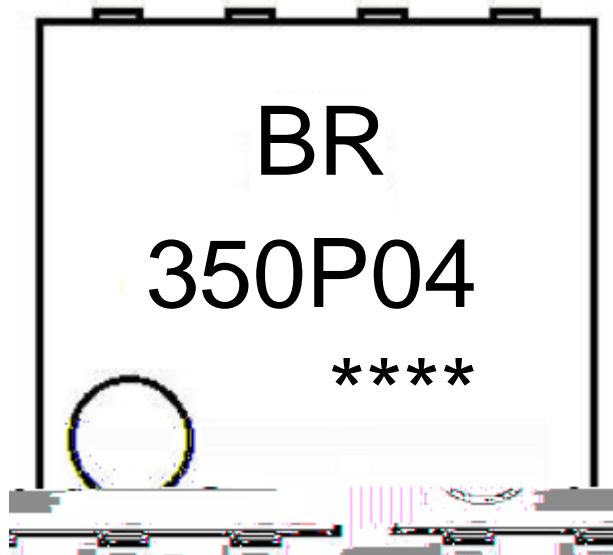


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DATA SHEET

/ Marking Instructions



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)

Note:

- | | | | |
|---|---------|-----------|---|
| 1 | 150 180 | 60 90sec; | 1.Preheating:150~180 , Time:60~90sec. |
| 2 | 245±5 | 5±0.5sec; | 2.Peak Temp.:245±5 , Duration:5±0.5sec. |
| 3 | 2 10 | /sec. | 3. Cooling Speed: 2~10 /sec. |

/ Resistance to Soldering Heat Test Conditions

605±5