

5 é / Descriptions

PDFN5 ~6A .> // x ; m Í % ”

MOS « | • 'ož

Complementary Enhancement MOSFET in a PDFN5 h 6A Plastic Package.

□ a / Features

N-channel

P-channel

 $V_{DS}(V)=30V$ $V_{DS}(V)=-30V$ $I_D=39.5A$ $I_D=-39A$ $R_{DS(ON)}<10m (V_{GS}=10V)$ $R_{DS(ON)}<12m (V_{GS}=-10V)$ $R_{DS(ON)}<15m (V_{GS}=4.5V)$ $R_{DS(ON)}<20m (V_{GS}=-4.5V)$

... ` AEC-Q101 ö Ö ä U ´ Å } L z —)í D }ož

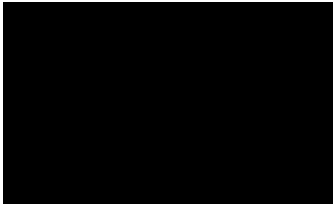
Qualified to AEC-Q101 Standards for High Reliability; HF Product.

Đ ÷ / Applications

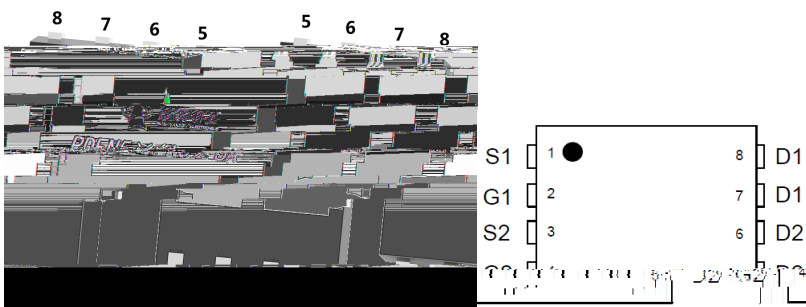
9 ä ä DC/DC ô E y ä • ¼ož 9 • ĺ ú • ¼ ê !² ò • k á V ñ • } Lož

These devices are well suited for high efficiency switching DC/DC converters and switch mode power supplies. And suitable for use as a load switch or in PWM applications, Meet the stringent requirements of automotive applications.

Ã W] Ô · / Equivalent Circuit



• Ů - æ / Pinning



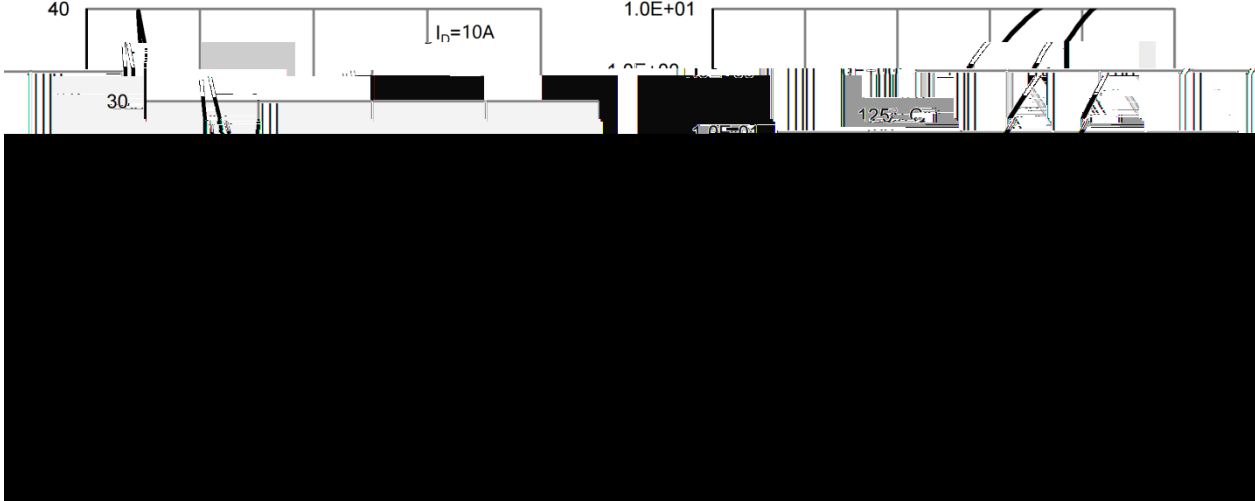
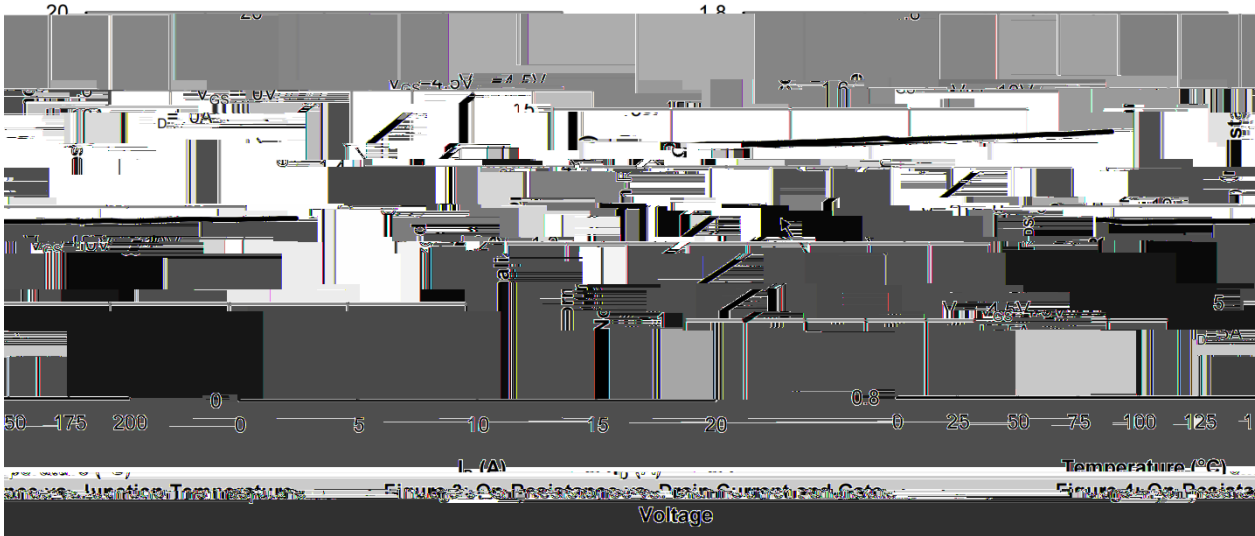
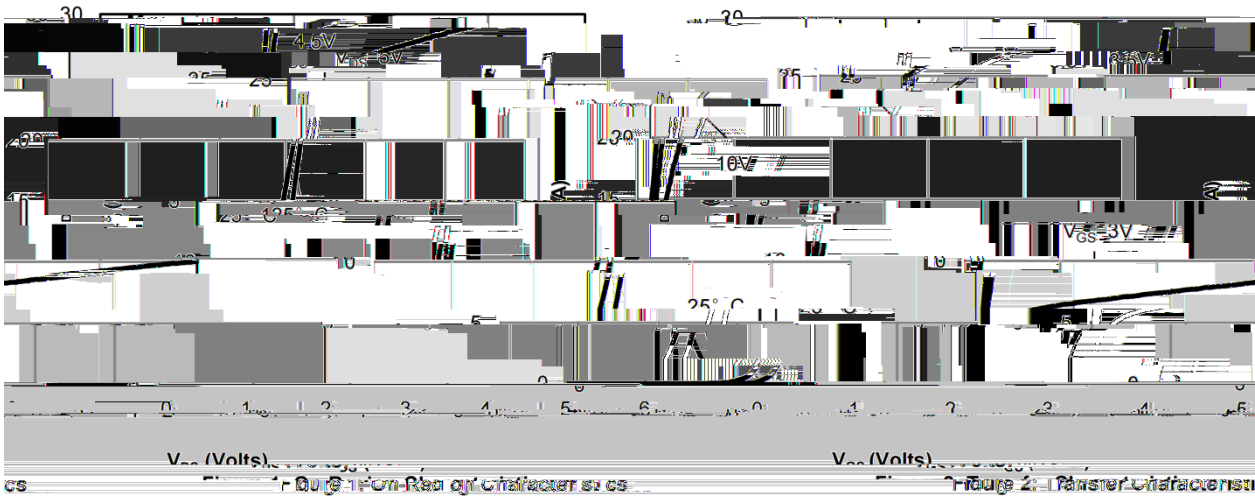
, M V / Marking

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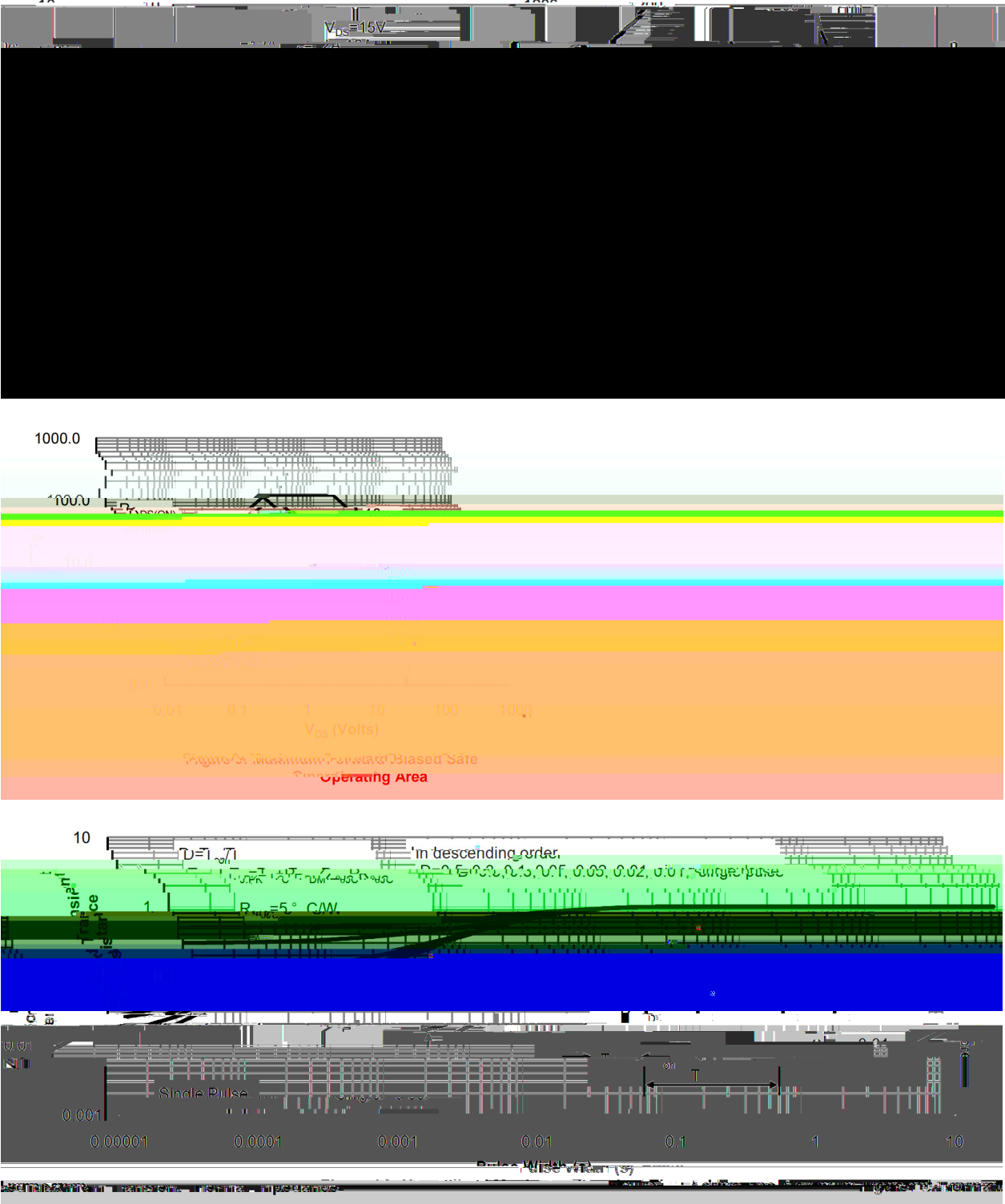
See Marking Instructions.

@ f Parameter	... Z Symbol	y i Ú ^ Test Conditions	Â 4 › Min	Á ° › Typ	Â Ý › Max	% y Unit
Drain-Source Breakdown Voltage Zero Gate Voltage Drain Current BV	BV _{DSS}	V _{GS} =0V I _D =250 A	30	35		V

1. 特性曲线 / N-CHANNEL Electrical Characteristic Curve



1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100 / N-CHANNEL Electrical Characteristic Curve

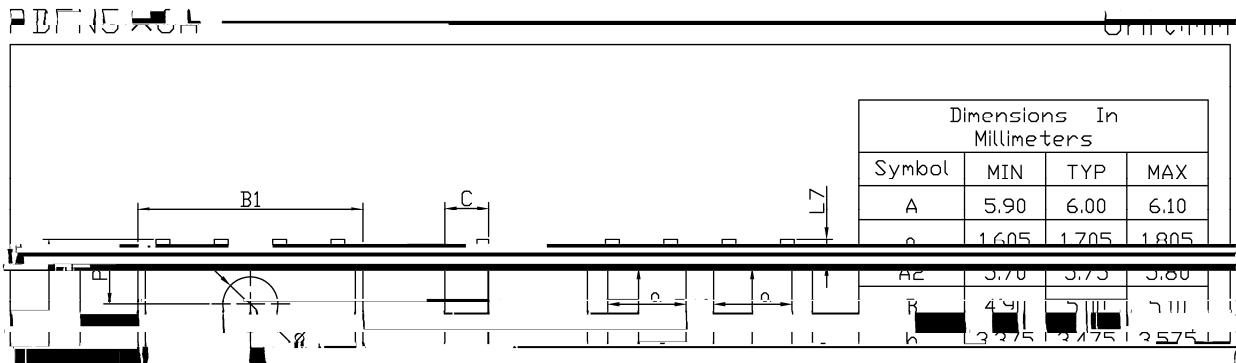


@ f Parameter	... Z Symbol	y i Ú ^ Test Conditions	Â 4 > Min	Á ° > Typ	Â Ý > Max	% y Unit
Drain-Source Breakdown Voltage	BV _{DSS}	V _{GS} =0V I _D =-250 A	-30	-37		V
Zero Gate Voltage Drain Current	I _{DSS}	V _{DS} =-30V V _{GS} =0V			-1.0	A
Gate-Body leakage current	I _{GSS}	V _{GS} =±20V V _{DS} =0V			±100	nA
Gate Threshold Voltage	V _{GS(th)}	V _{DS} =V _{GS} I _D =-250 A	-1.0	-1.7	-2.5	V
Static Drain-Source On-Resistance	R _{DS(on)}	V _{GS} =-10V I _D =-10A		10	12	m
		V _{GS} =-4.5V I _D =-5A		16	20	m
Diode Forward Voltage	V _{SD}	V _{GS} =0V I _S =-1.0A			-1.2	V
Input Capacitance	C _{iss}	V _{DS} =-25V V _{GS} =0V f=1.0MHz		3350		pF
Output Capacitance	C _{oss}			2400		pF
Reverse Transfer Capacitance	C _{rss}			1050		pF

BRCS080C03YMQ

Rev.B Mar.-2024

Ø □ =) ☉ / Package Dimensions



, M y f / Marking Instructions



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7 y	V ñ —) í D } ö æ
080C03 y	° Z W A
y	ÿ D Z W A k š Ÿ D Z J
Note y	
BR y	Company Code
Q:	Automobile halogen-free product Code
080C03 y	Product Type Code
****:	Lot No. Code, code change with Lot No

