5 é / Descriptions

PDFN5 ˜6A .> / / x ; m Í % ” MOS « | • ’ož
Complementary Enhancement MOSFET in a PDFN5 h 6A Plastic Package.

¤ ª / Features

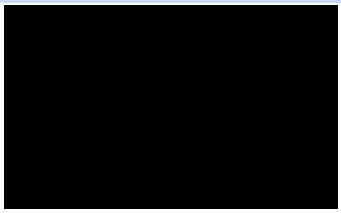
N-channel	P-channel
V_{DS}(V)=30V	V_{DS}(V)=-30V
I_D=39.5A	I_D=-39A
$R_{DS(ON)}$<10m (VGS=10V)	$R_{DS(ON)}$<12m (VGS=-10V)
$R_{DS(ON)}$<15m (VGS=4.5V)	$R_{DS(ON)}$<20m (VGS=-4.5V)

… ` AEC-Q101 ö Õ ä U ´ Å } L z —)í D }ož
Qualified to AEC-Q101 Standards for High Reliability; HF Product.

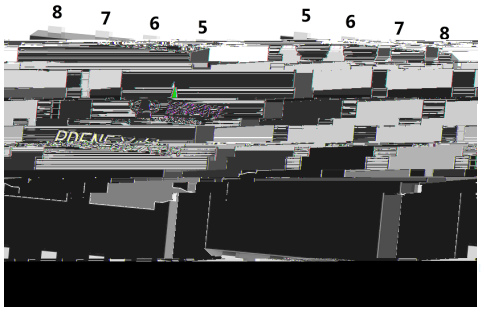
Ð ÷ / Applications

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



• Û - æ / Pinning

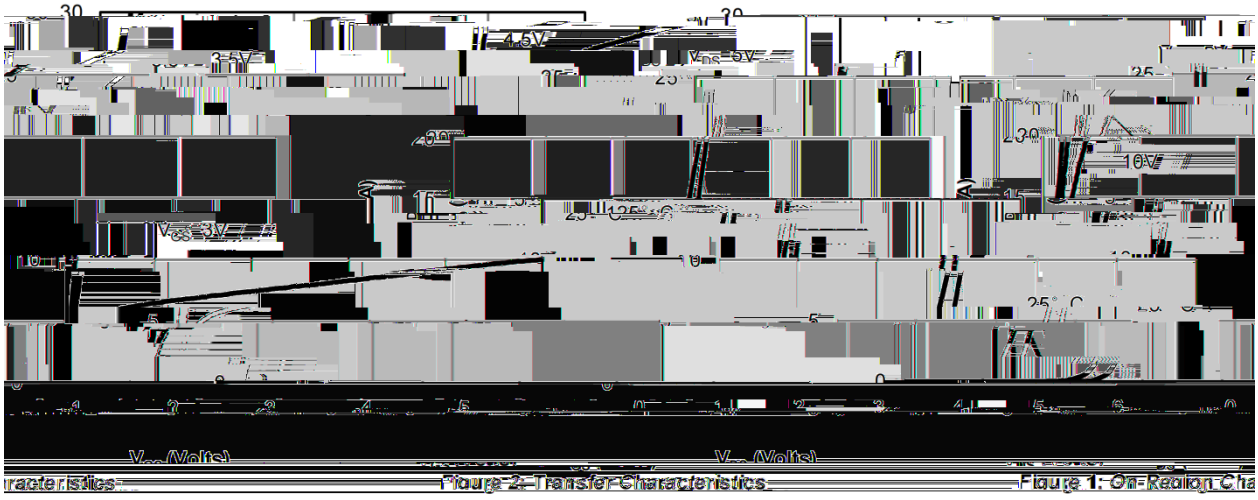


, M V / Marking

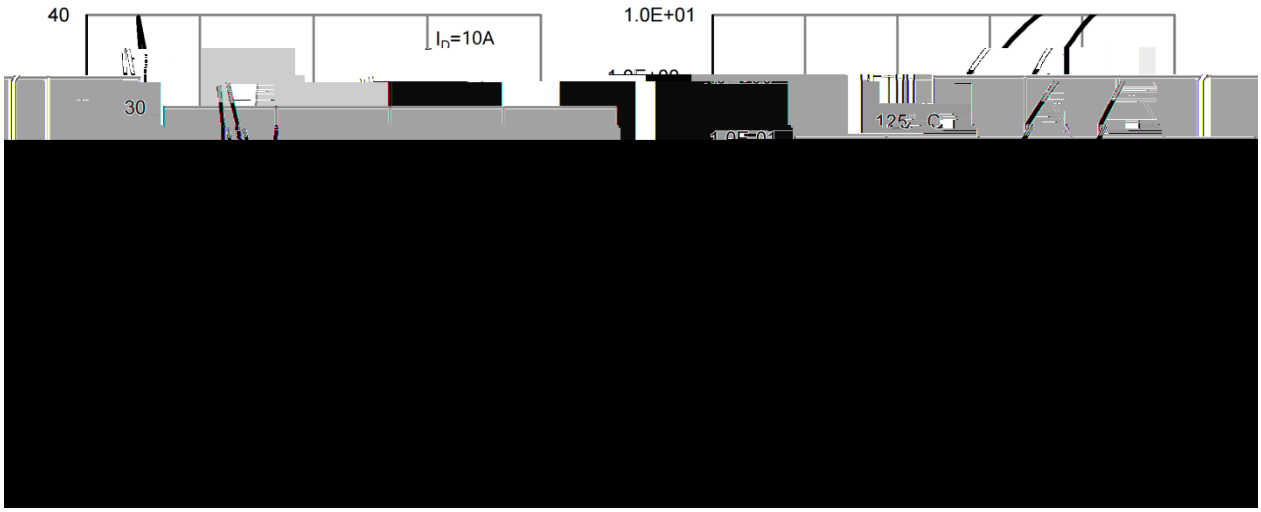
• - ~ ª ¢ož
See Marking Instructions.

@ ƒ Parameter	… Z Symbol	y ¡ Ú ^ Test Conditions	Â 4 › Min	Á º › Typ	Â Ý › Max	% y Unit
Drain-Source Breakdown Voltage	BV_{DSS}	V_{GS}=0V I_D=250 A	30	35		V
Zero Gate Voltage Drain Current BV						

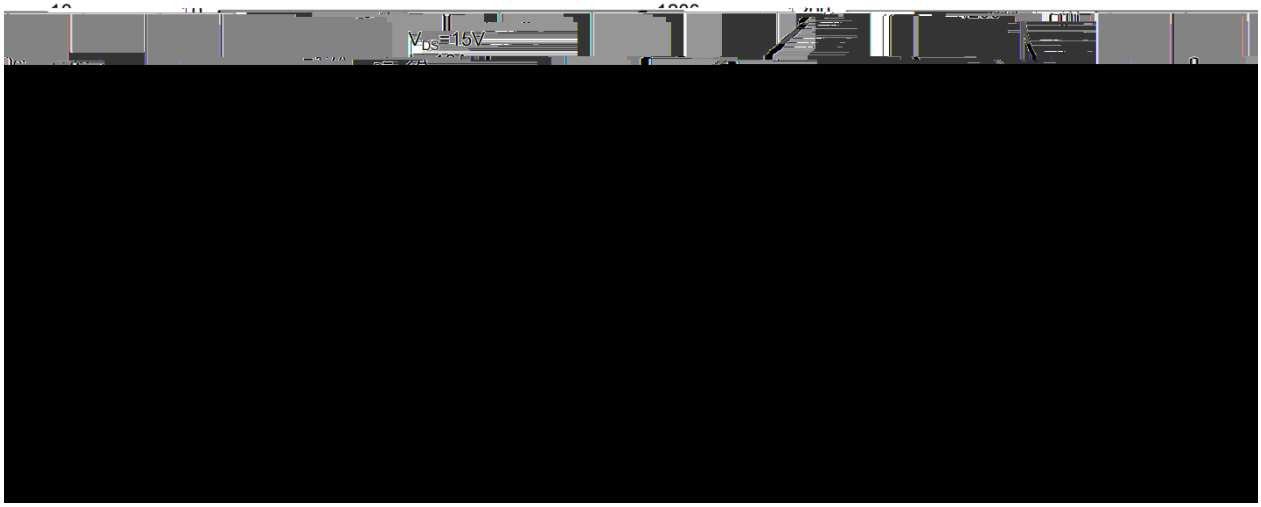
1 ?è Ô ? d • Ž ¢ / N-CHANNEL Electrical Characteristic Curve

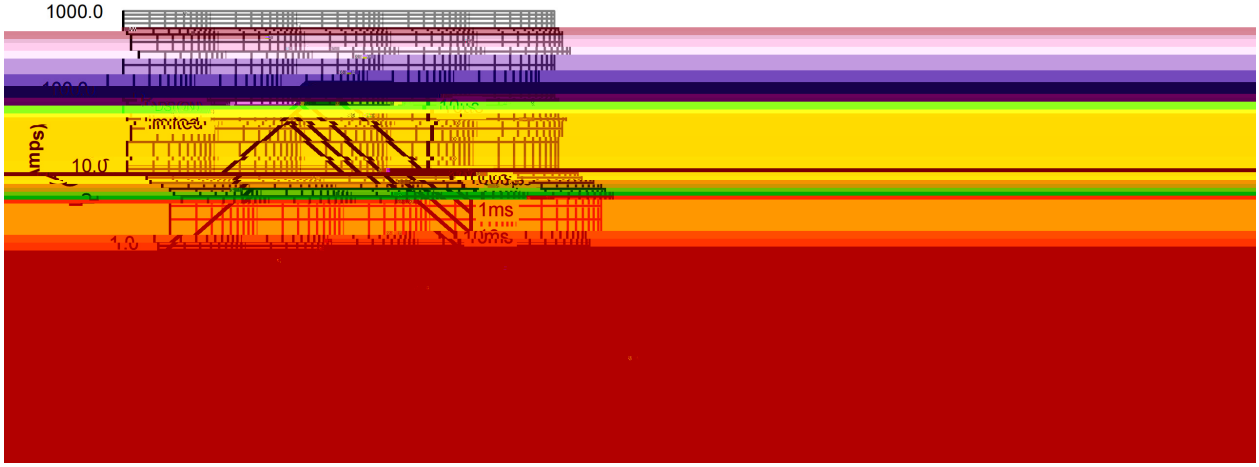


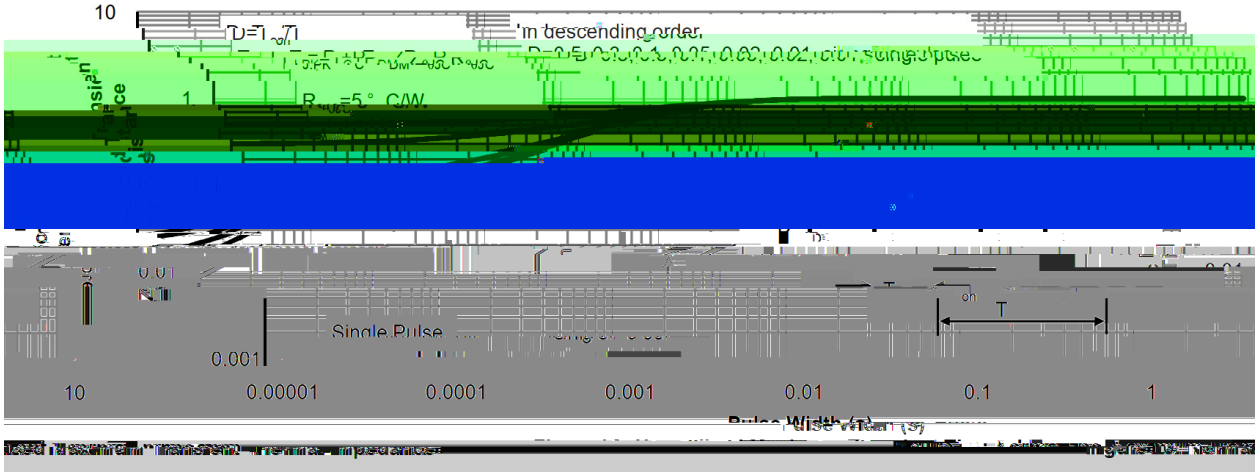




1 ?è Ô ? d • Ž ¢ / N-CHANNEL Electrical Characteristic Curve



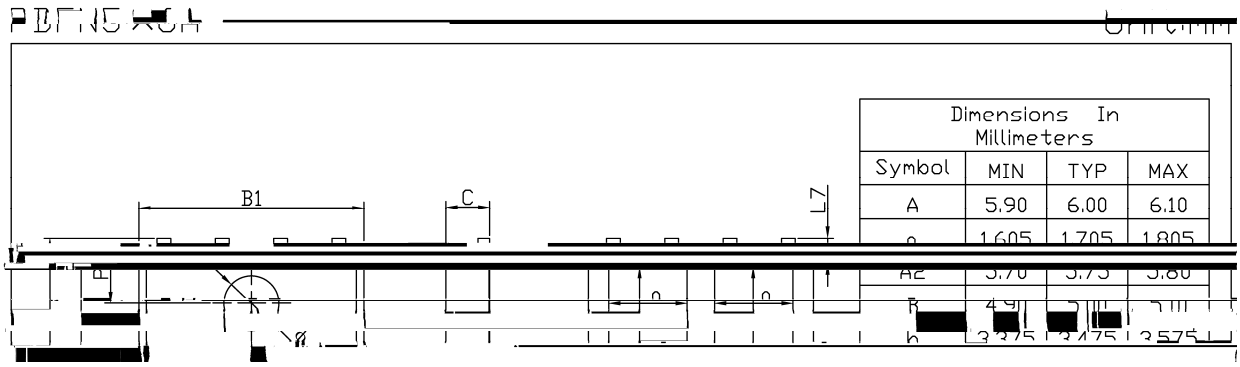




@ ƒ Parameter	… Z Symbol	y ¡ Ú ^ Test Conditions	Â 4 › Min	Á º › Typ	Â Ý › Max	% y Unit
Drain-Source Breakdown Voltage	BV_{DSS}	V_{GS}=0V I_D=-250 A	-30	-37		V
Zero Gate Voltage Drain Current	I_{DSS}	V_{DS}=-30V V_{GS}=0V			-1.0	A
Gate-Body leakage current	I_{GSS}	V_{GS}=±20V V_{DS}=0V			±100	nA
Gate 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

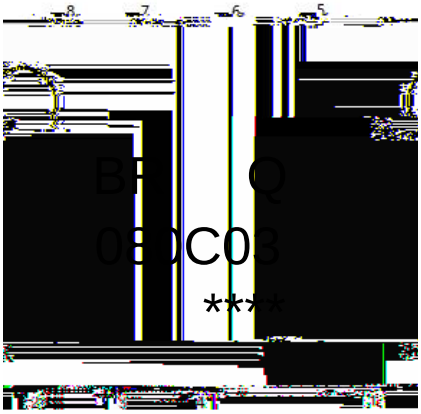
BRCS080C03YMQ
Rev.B Mar.-2024

Ø ¤ =) ¢ / Package Dimensions



Dimensions In Millimeters			
Symbol	MIN	TYP	MAX
A	5.90	6.00	6.10
[illegible]	1.605	1.705	1.805
A2	3.70	3.75	3.80
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	3.375	3.475	3.575

, M y ƒ / Marking Instructions



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080C03 y	º 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