

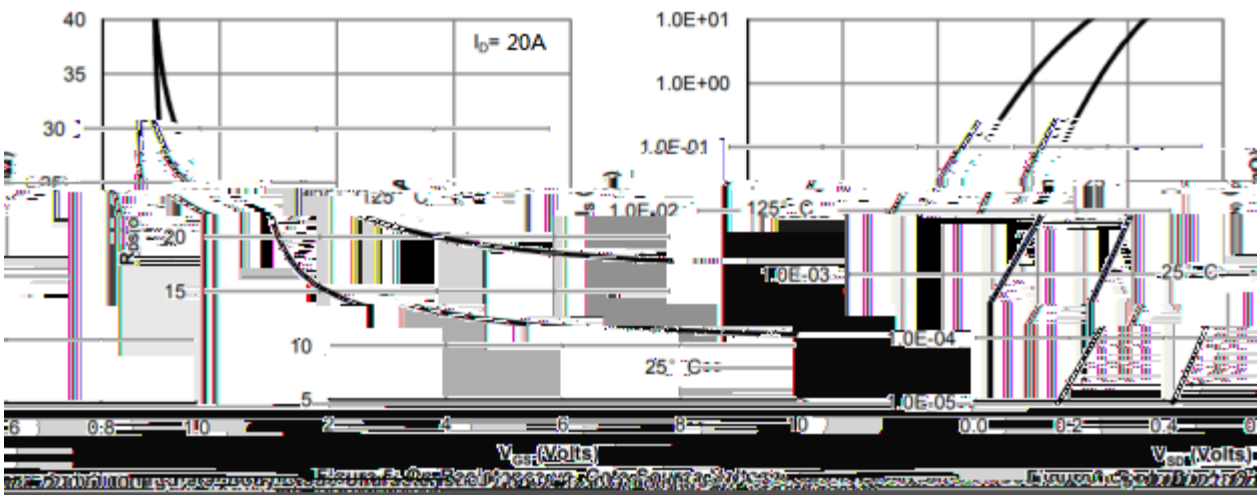
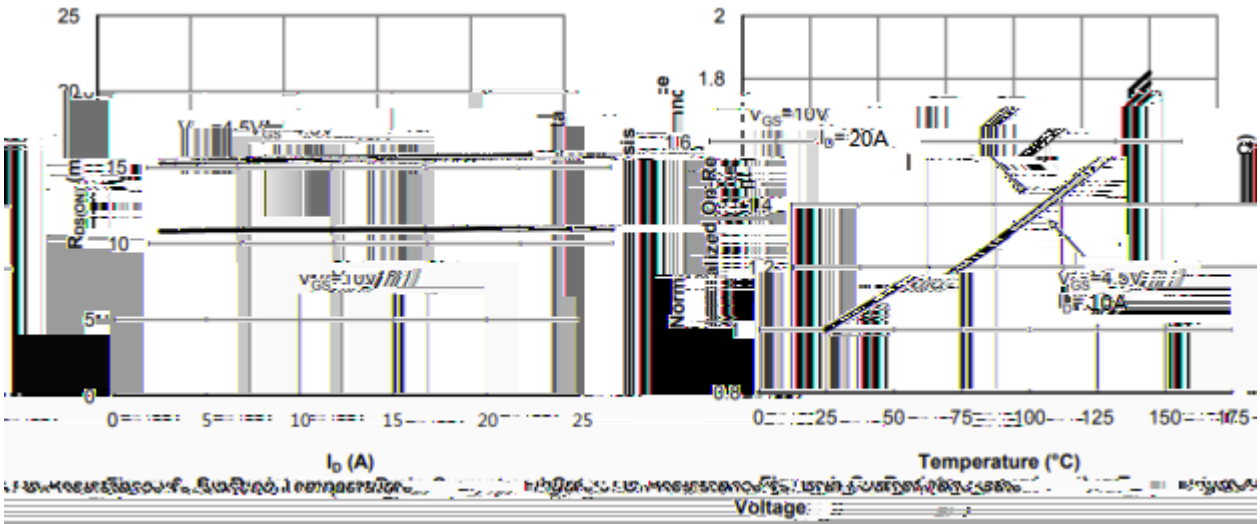
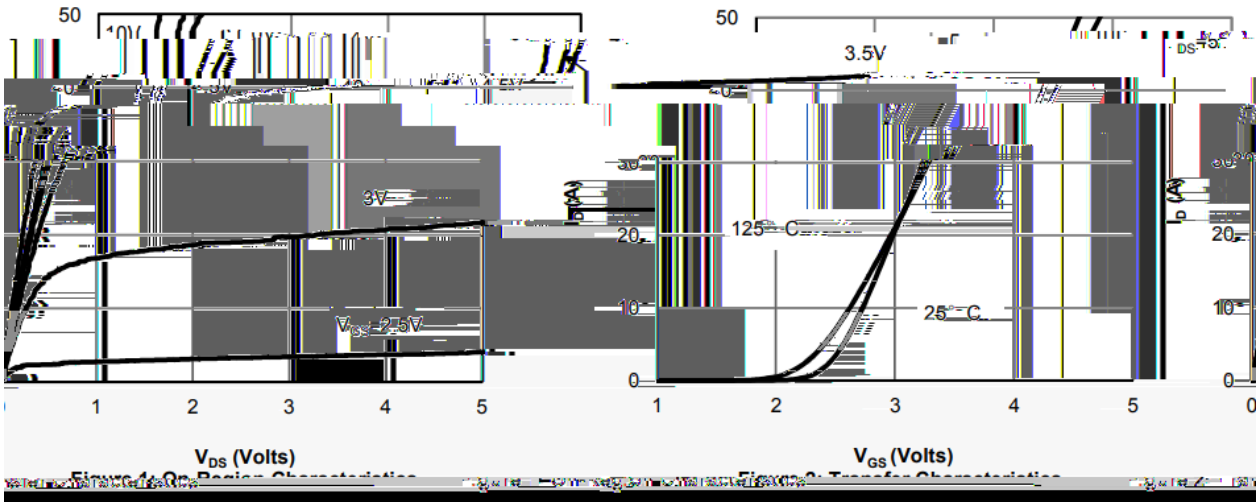
@ f Parameter	... Z Symbol	f › Rating	% y Unit
Drain-Source Voltage	V _{DS}	60	V
Continuous Drain Current	I _D	43	A
Pulsed Drain Current	I _{DM}	111	A
Gate-Source Voltage	V _{GS}	f 20	V
Power Dissipation	P _D (T _c =25)	43	W
Avalanche energy(L=0.5mH)	E _{AS}	200	mJ
Avalanche Current(L=0.5mH)	I _{AS}	20	A
Junction and Storage Temperature Range	T _j , T _{stg}	-55 to 150	-
Maximum Junction-to-Ambient	t 0 10s	R _{θJA}	25
	Steady-State		60
Maximum Junction-to-Case	Steady-State	R _{θJC}	2.9

@ 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	60	64		V
Zero Gate Voltage Drain Current	I _{DSS}	V _{DS} =60V V _{GS} =0V			1	A
Gate-Body Leakage Current Forward	I _{GSS}	V _{GS} =±20V V _{DS} =0V			±0.1	A
Gate Threshold Voltage	V _{GS(th)}	V _{DS} =V _{GS} I _D =250 A	1.0	1.6	2.5	V
Static Drain-Source On-Resistance	R _{DSON}	V _{GS} =10V I _D =20A		11.5	13	m
		V _{GS} =4.5V I _D =10A		15.5	18	m
Drain-Source Diode Forward Voltage	V _{SD}	V _{GS} =0V I _S =1A			1.2	V
Input Capacitance	C _{iss}	V _{DS} =25V V _{GS} =0V f=1.0MHz		1010		pF
Output Capacitance	C _{oss}			250		
Reverse Transfer Capacitance	C _{rss}			280		
Gate resistance	R _g	V _{GS} =0V 6 2 6 e V DS				

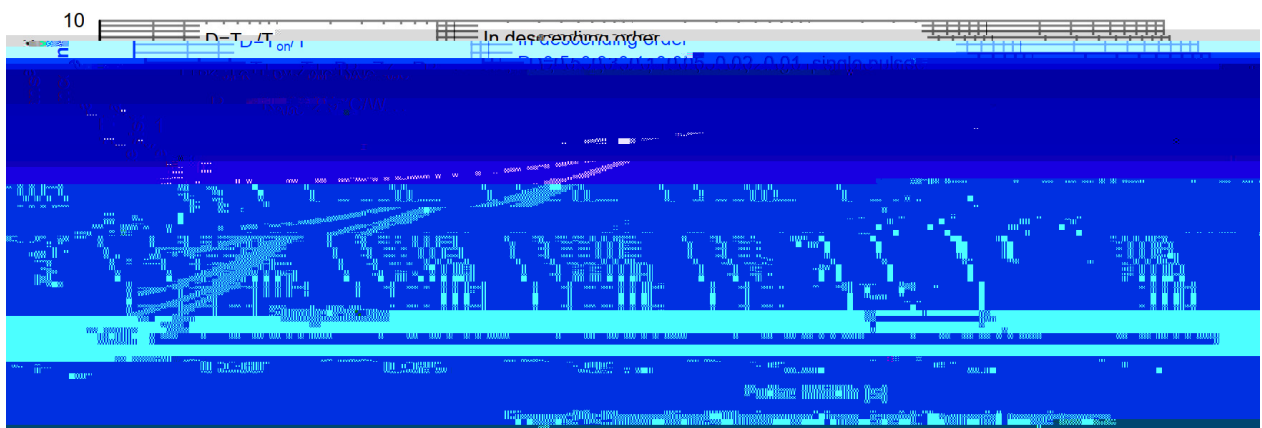
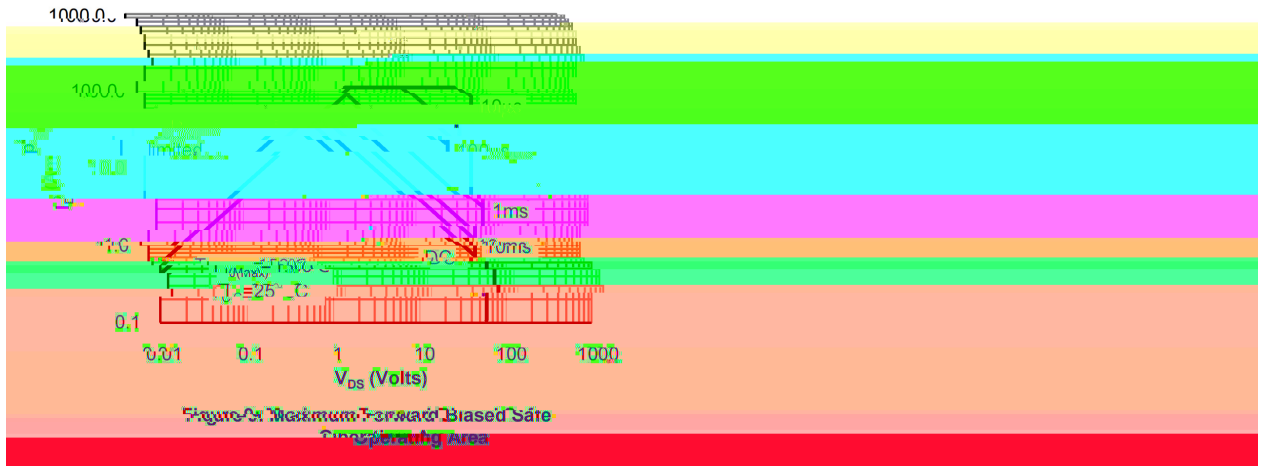
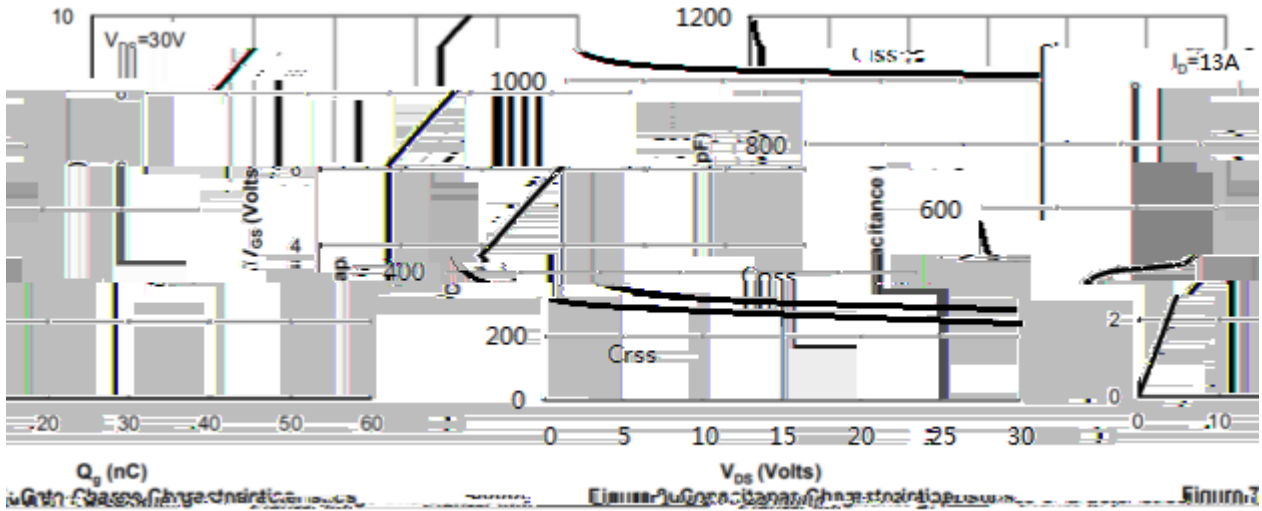
④ì × ? d / Electrical Characteristics(Ta=25 ;)

@ f Parameter	... Z Symbol	y j Ú ^ Test Conditions	Â 4 › Min	Á ° › Typ	Â Ý › Max	% y Unit
Turn-On Delay Time	t _{d(on)}	V _{GS} =10V R _L =2.3 V _{DS} =30V R _{GEN} =3		5		ns
Turn-On Rise Time	t _r			3		
Turn-Off Delay Time	t _{d(off)}			19		
Turn-Off Fall Time	t _f			3		

Electrical Characteristic Curve



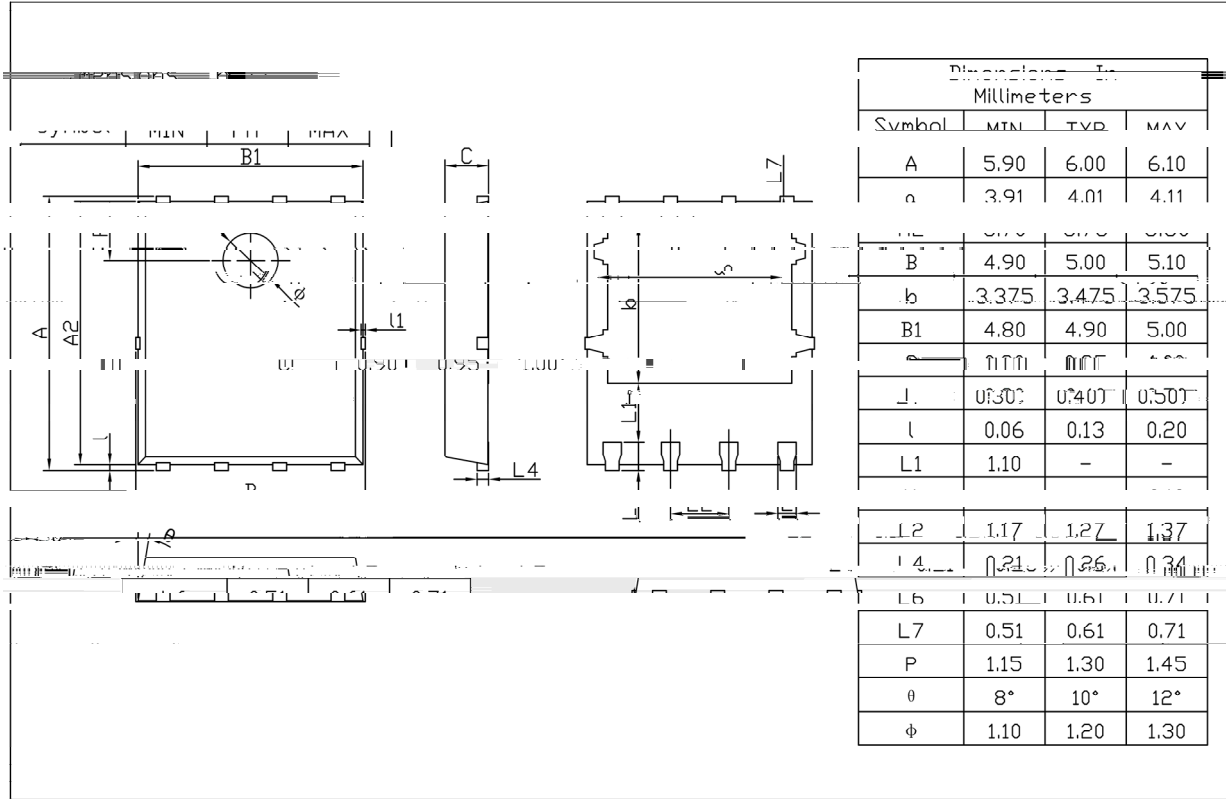
Electrical Characteristic Curve



∅ ≡) φ / Package Dimensions

PDFN5 X6

Unit:mm



Rev.01 202209

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- 120N06S 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
- 120N06S y Product Type Code
- ****: Lot No. Code, code change with Lot No

BRCS120N06SZCQ
Rev.A Jul.-2024

DATA SHEET