@ ƒ Parameter		… Z Symbol	ƒ › 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 ©JA	25	/ W
	Steady-State		60	
Maximum Junction-to-Case	Steady-State	R ©JC	2.9	

@ 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	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	$R_{DS(on)}$	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				

Ô4ì × ? d / Electrical Characteristics(Ta=25 ;)

@ ƒ Parameter	… Z Symbol	y ¡ Ú ^ Test Conditions	Â 4 › Min	Á º › Typ	Â Ý › Max	% y Unit
Turn-On Delay Time	$t_{d(on)}$	V_{GS}=10V V_{DS}=30V R_L=2.3 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		

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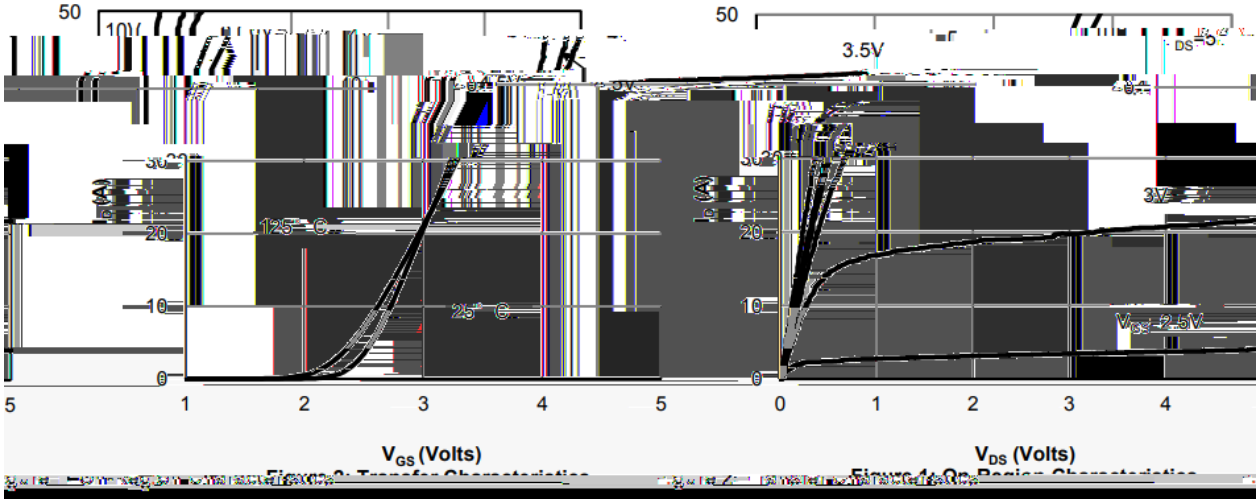
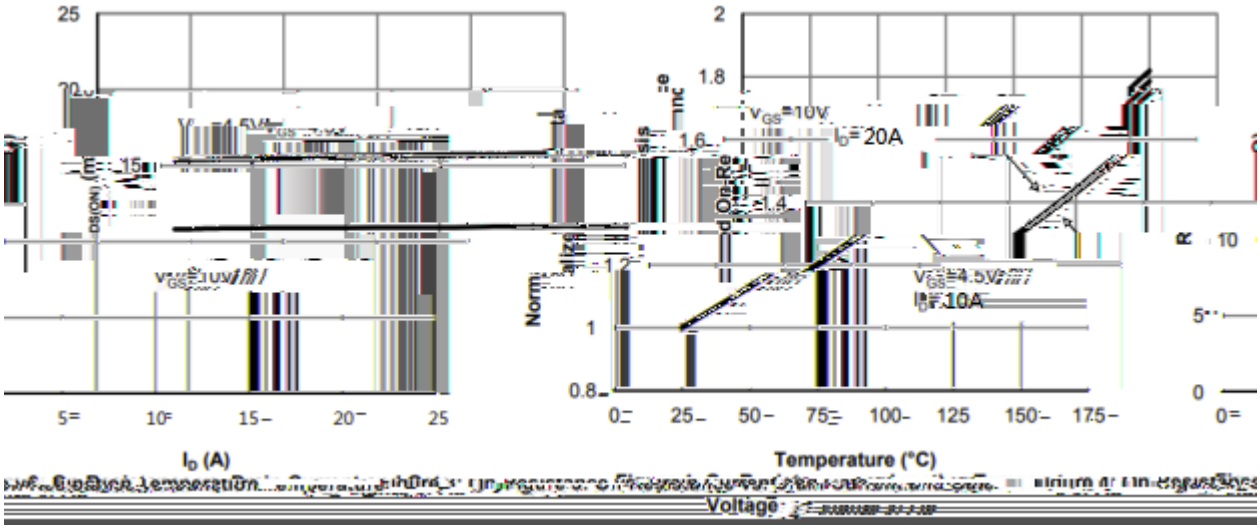
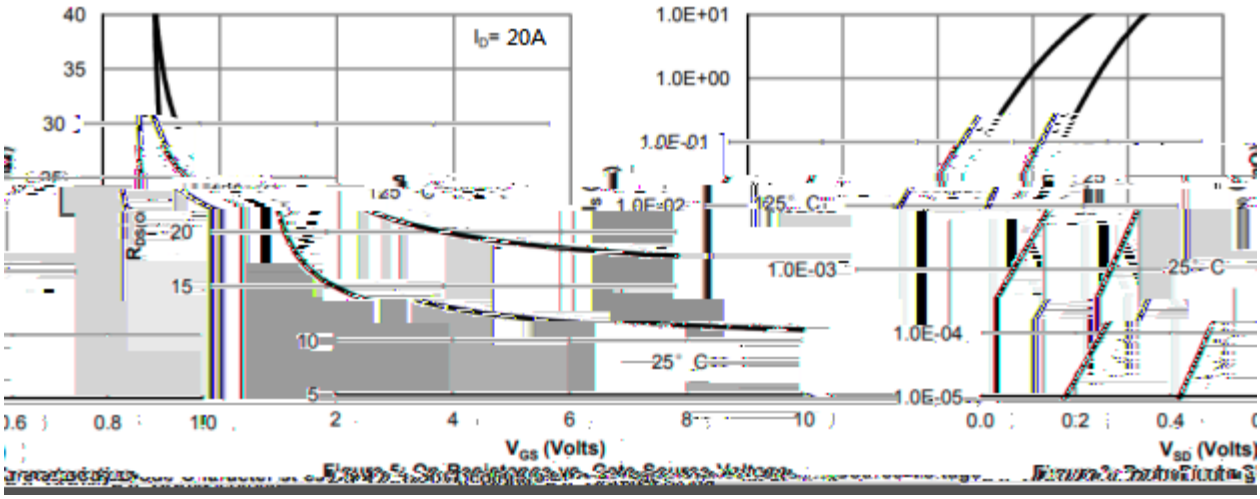






Ô ? d • Ž ¢ / Electrical Characteristic Curve

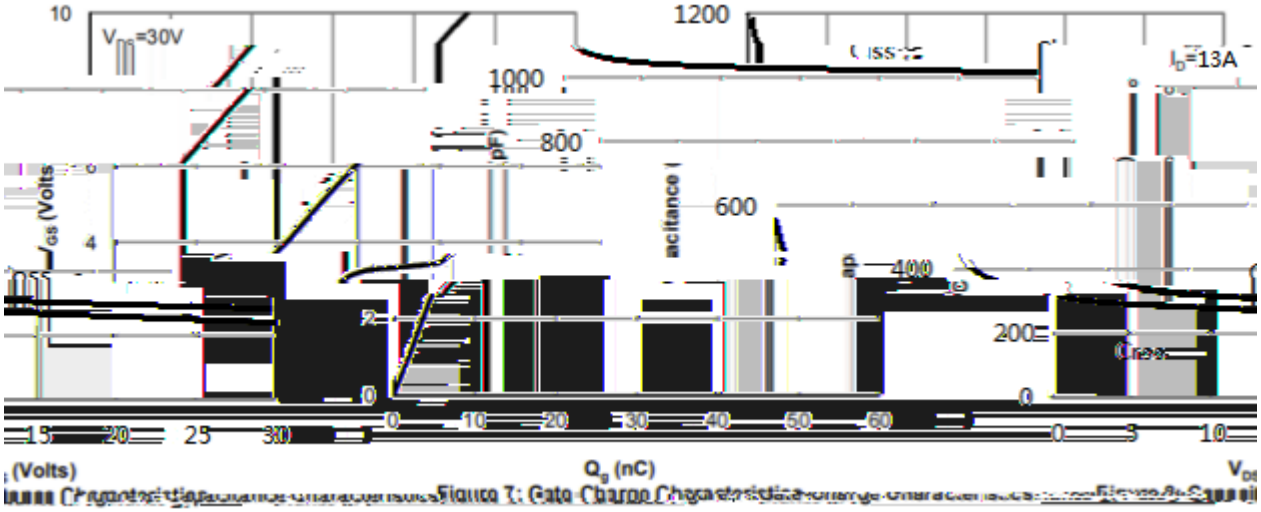
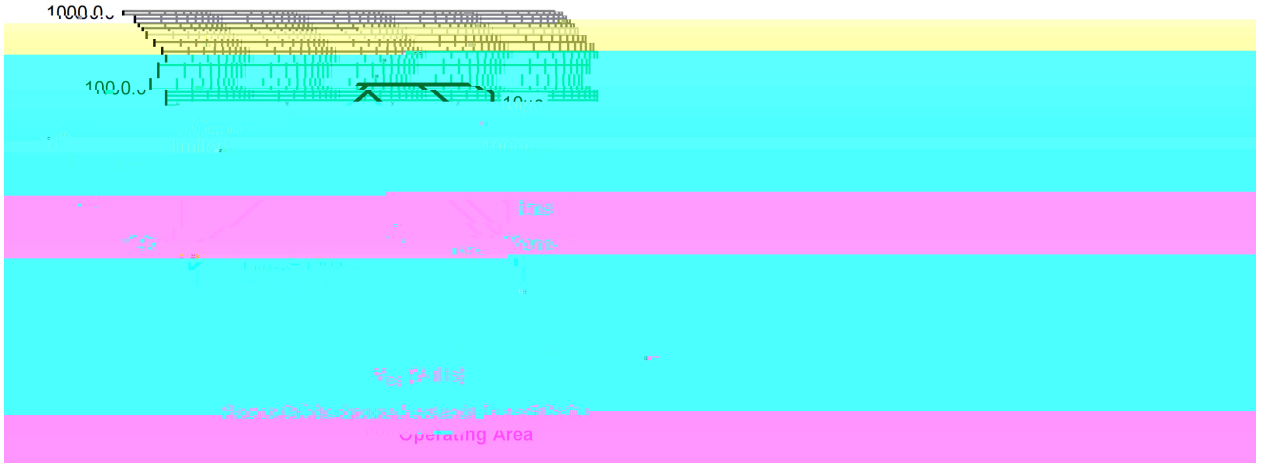
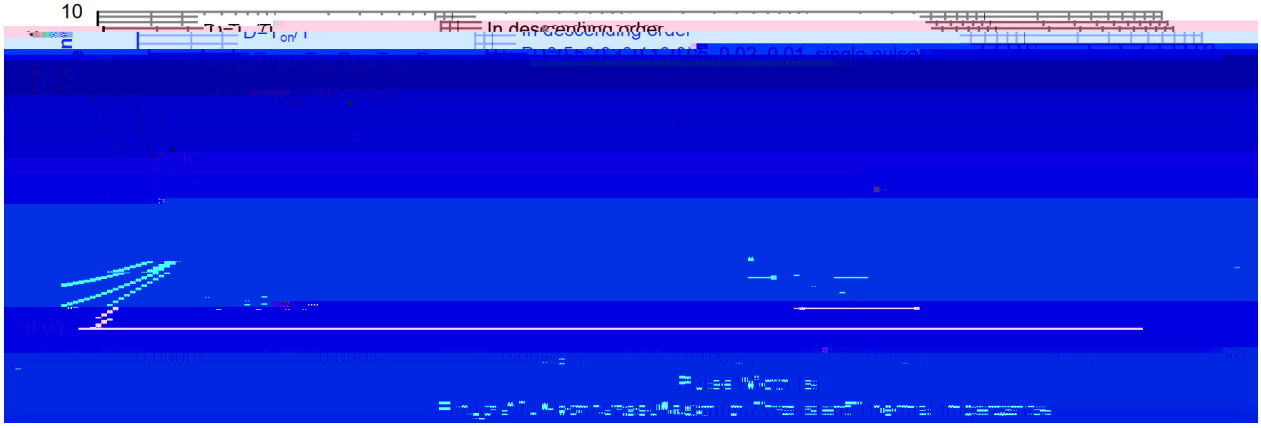


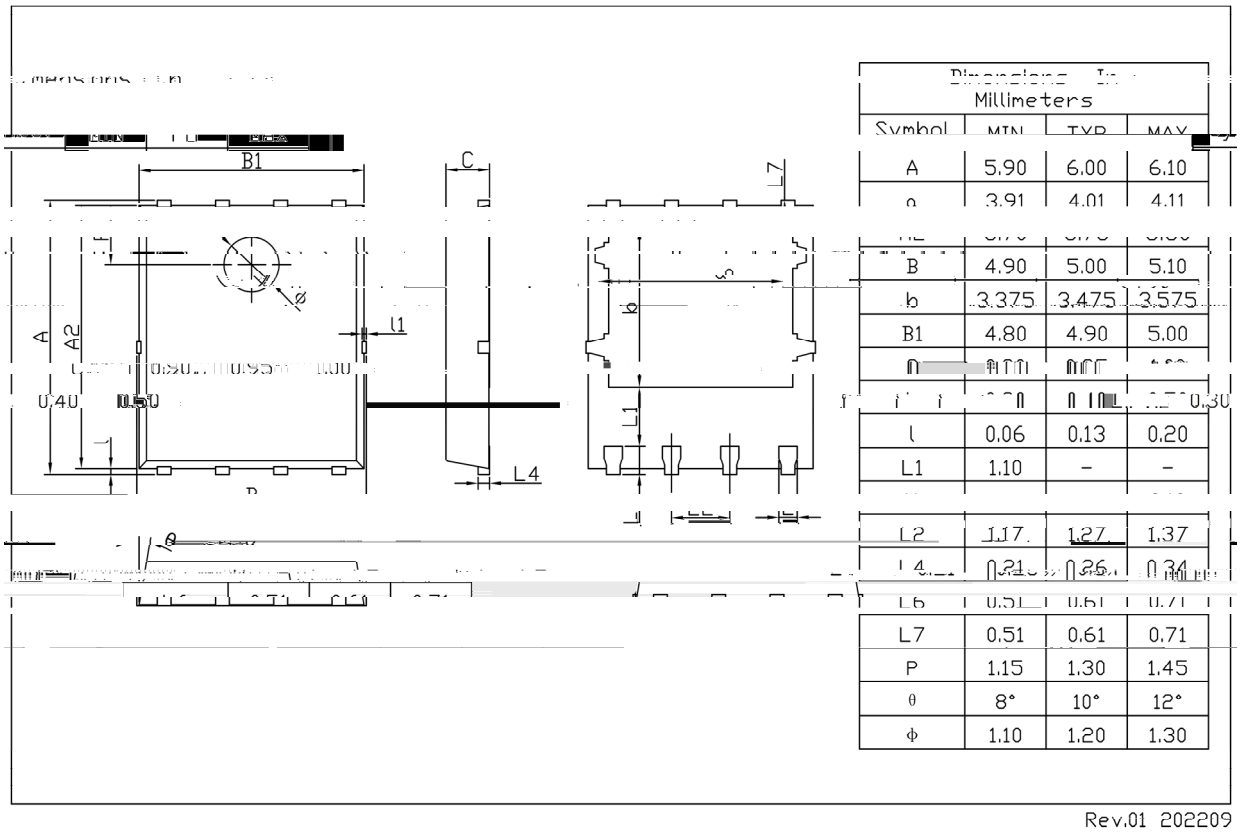
Figure 7: Gate Charge Characteristics





Ø ¤ =) ¢ / Package Dimensions

PDFN5×6 Unit:mm



Dimensions In Millimeters			
Symbol	MIN	TYP	MAX
A	5.90	6.00	6.10
[illegible]	3.91	4.01	4.11
B	4.90	5.00	5.10
b	3.375	3.475	3.575
B1	4.80	4.90	5.00
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	0.30
l	0.06	0.13	0.20
L1	1.10	–	–
[illegible]	[illegible]	[illegible]	[illegible]
L2	1.17	1.27	1.37
L4	0.21	0.26	0.34
L6	0.51	0.61	0.71
L7	0.51	0.61	0.71
P	1.15	1.30	1.45
θ	8°	10°	12°
Φ	1.10	1.20	1.30

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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