PDFN5×6A P
Dual P-CHANNEL MOSFET in a PDFN5×6A Plastic Package.

V_{DS}(V)=-40V I_D=-20A
$R_{DS(ON)}$@-10V<35 mq(Typ. 33 mq)
$R_{DS(ON)}$

Parameter		Symbol	Rating	Unit
Drain-Source Voltage		V_{DSS}	-40	V
Drain Current		I_D(Tc=25)	-20	A
Drain Current - Pulsed		I_{DM}	-46	A
Gate-Source Voltage		V_{GS}	±20	V
Avalanche Current		I_{AS}	13	A
Single Pulsed Avalanche Energy ˜ L=0.5mH ¯		E_{AS}	54	mJ
Power Dissipation		P_D	25	W
Storage Temperature Range		T_{stg}	-55 150	
Thermal Resistance-Junction to Ambient	t 0 10s	R ' JA	40	/W
	Steady-State		62.5	
Thermal Resistance-Junction to Case	Steady-State	R ' JC	5	/W

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Drain-Source Breakdown Voltage	BV_{DSS}	V_{GS}=0V I_D=-250εA	-40	-46		V
Zero Gate Voltage Drain Current	I_{DSS}	V_{DS}=-40V V_{GS}=0V			1.0	εA
Gate-Body Leakage Current Forward	I_{GSS}	V_{GS}=±20V V_{DS}=0V			±0.1	εA
Gate Threshold Voltage	$V_{GS(th)}$	V_{DS}=V_{GS} I_D=-250εA	-1.0	-1.4	-2.5	V
Static Drain-Source On-Resistance	$R_{DS(on)}$	V_{GS}=-10V I_D=-20A		33	35	mq
		V_{GS}=-4.5V I_D=-10A		40	60	
Drain-Source Diode Forward Voltage	V_{SD}	V_{GS}=0V I_S=-1A			-1.2	V
Gate resistance	R_g	V_{GS}=0V V_{DS}=0V, f=1MHz		9.5		q
Input Capacitance	C_{iss}	V_{DS}=-25V V_{GS}=0V f=1.0MHz		1500		pF
Output Capacitance	C_{oss}			620		
Reverse Transfer Cap						

/ Electrical Characteristics(Ta=25)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Turn-On Delay Time	$t_{d(on)}$	V_{GS}=-10V V_{DS}=-20V R_L=1.6 ¡ R_{GEN}=3q		6.5		ns
Turn-On Rise Time	t_r			9.2		
Turn-Off Delay Time	$t_{d(off)}$			52		
Turn-Off Fall Time	t_f			50.8		

/ Electrical Characteristic Curve

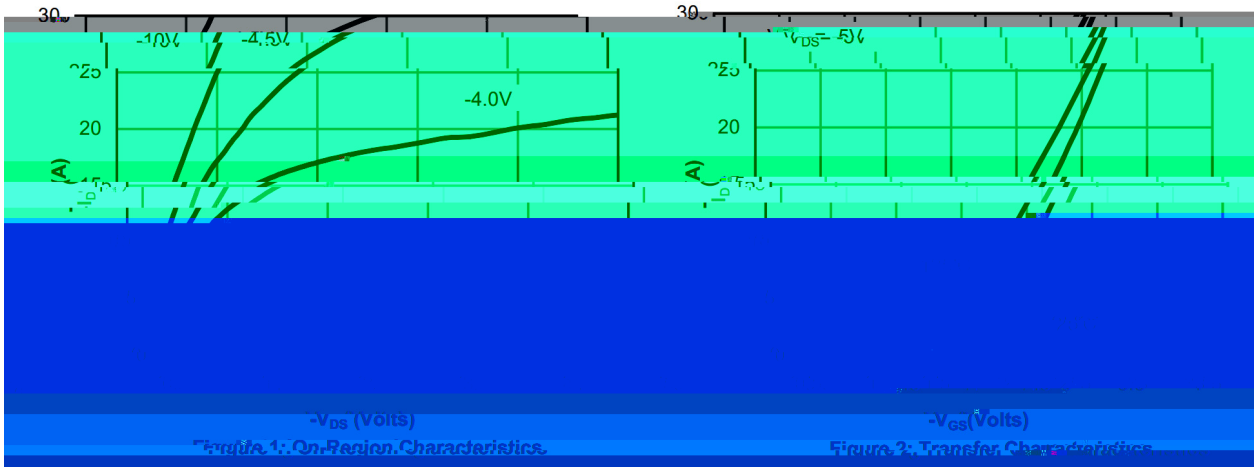


Figure 1: On-Region Characteristics

Figure 2: Transfer Characteristics

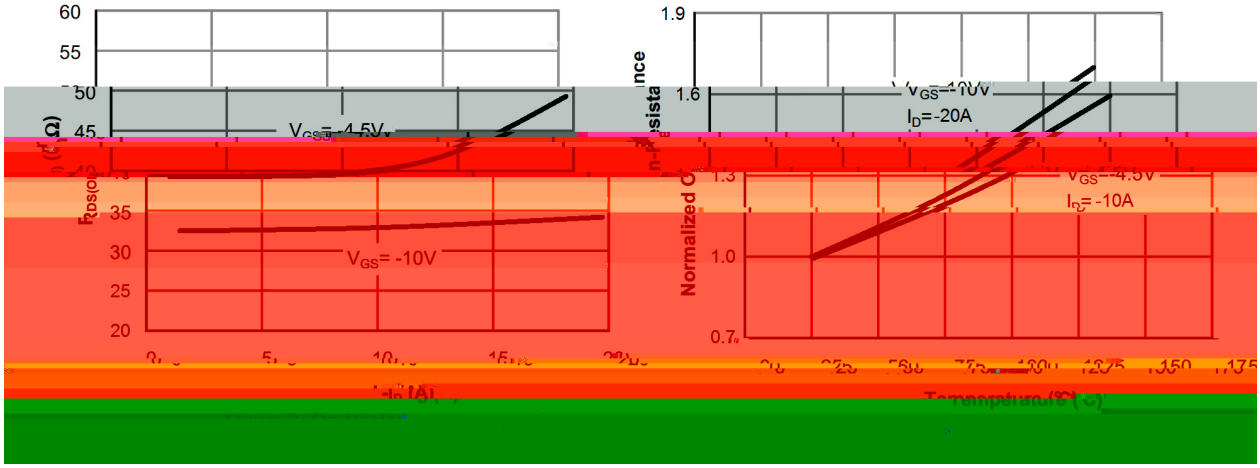


Figure 3: On-Resistance vs. Drain Current and Gate Voltage

Figure 4: On-Resistance Variation with Temperature

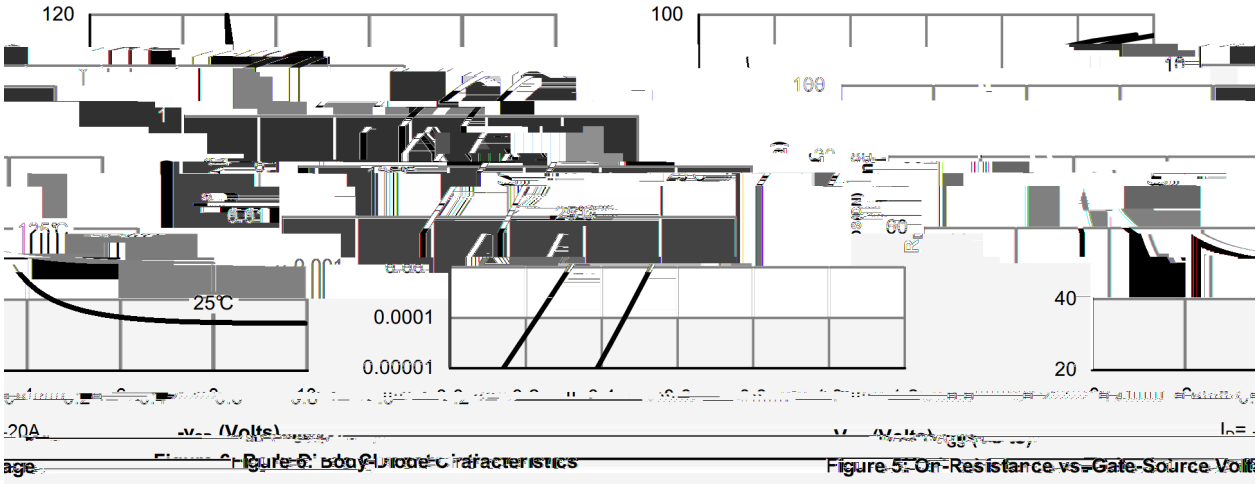
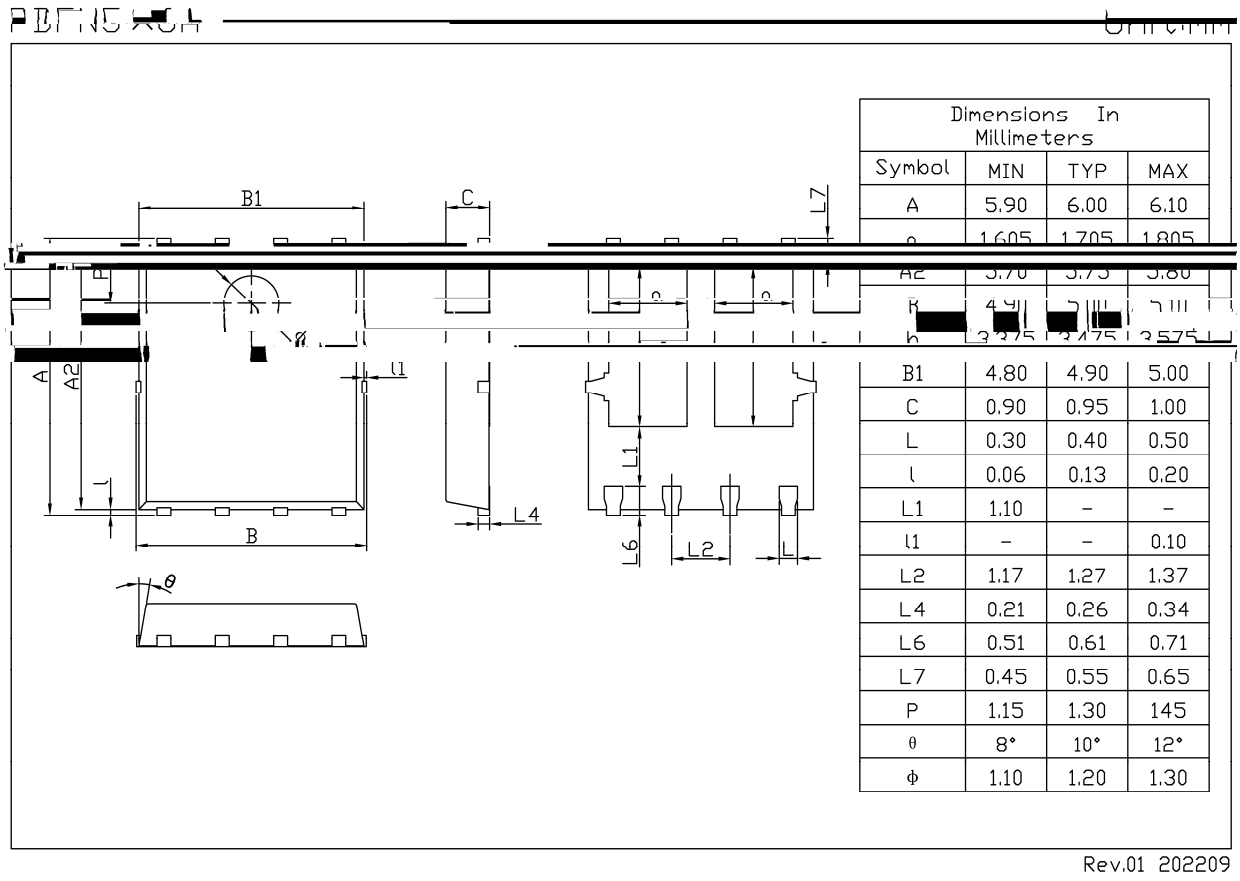


Figure 5: Body Diode Characteristics

Figure 6: On-Resistance vs. Gate-Source Voltage

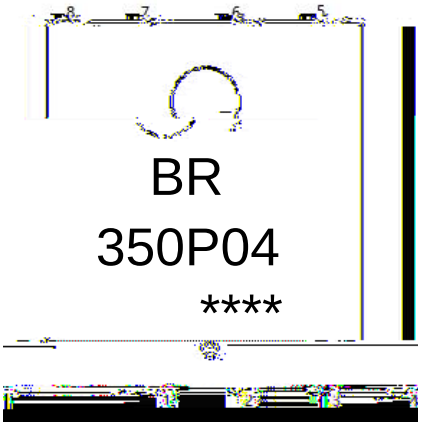
/ Package Dimensions



Dimensions In Millimeters			
Symbol	MIN	TYP	MAX
A	5.90	6.00	6.10
[redacted]	1.605	1.705	1.805
[redacted]	[redacted]	3.75	3.80
[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	3.475	3.575
B1	4.80	4.90	5.00
C	0.90	0.95	1.00
L	0.30	0.40	0.50
l	0.06	0.13	0.20
L1	1.10	–	–
l1	–	–	0.10
L2	1.17	1.27	1.37
L4	0.21	0.26	0.34
L6	0.51	0.61	0.71
L7	0.45	0.55	0.65
P	1.15	1.30	145
θ	8°	10°	12°
ϕ	1.10	1.20	1.30

Rev.01 202209

/ Marking Instructions



BR

350P04

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Note

BR	Company Code
350P04	Product Type Code
****:	Lot No. Code, code change with Lot No