PDFN5×6 N

N-C a MOSFET a PDFN5 6 P a c Pac a

V_{DS}(V =40V I_D=60A

$R_{DS(ON)}$ @10V Ò6 Ý(T 5 6 q

$R_{DS(ON)}$ @4 5V Ò9 q(T 7 8 q

AEC-Q101 Q a d AEC-Q101 S a da d H R ab ,

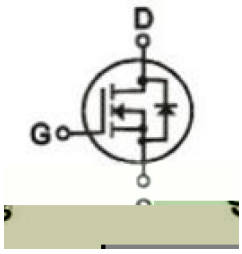
HF P d c

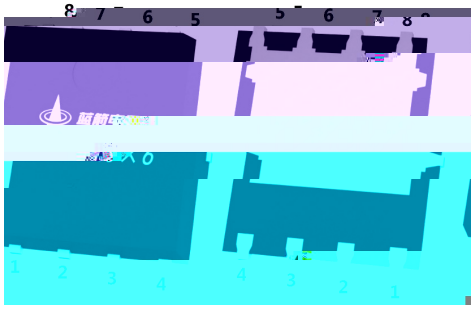
MB NB UMPC VGA B c -

Ba Ma a ,H F c P - -L ad S c B c C

MB NB UMPC VGA,N DC-DC P S ,L ad S c , M

a a ca





PIN1 2 3 S PIN4 G PIN5 6 7 8 D

S Ma I c

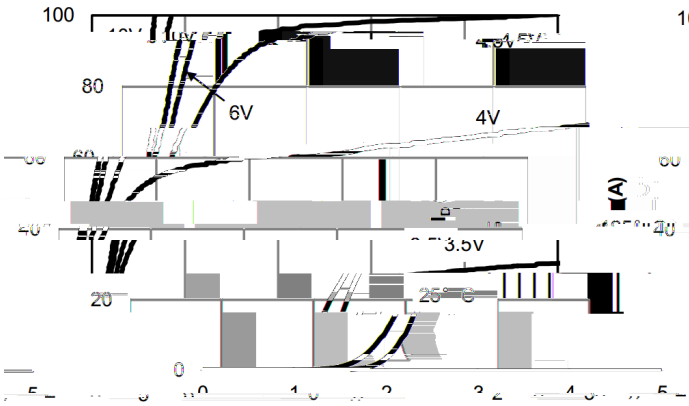
: b c c

Pa a		S b	Ra	U
D a -S c V a		V_{DSS}	40	V
D a C		I_D(Tc=25	60	A
D a C - P d		I_{DM}	120	A
Ga -S c V a		V_{GS}	20	V
S P d A a a c E		E_{AS}	300	J
A a a c C		I_{AS}	24 5	A
P D a		P_D(Tc=25	37	W
O a a d S a T a Ra		T_J,T	-55 150	
T a a c , c - a b	10	R JA	25	W
	S ad -S a		55	
T a a c , c - ca	S ad -S a	R JC	3 4	

Pa a	S b	T C d		M	T	Ma	U
D a -S c B a d V a	BV_{DSS}	V_{GS}=0V	I_D=250εA	40	46		V
Z Ga V a D a C	I_{DSS}	V_{DS}=40V	V_{GS}=0V			1	εA
Ga -B d L a a C F a d	I_{GSS}	V_{GS}= 20V	V_{DS}=0V			0 1	εA
Ga T d V a	$V_{GS(}$	V_{DS}=V_{GS}	I_D=250εA	1 0	1 6	2 5	V
S a c D a -S c O -R a c	$R_{DS(}$	V_{GS}=10V	I_D=20A		5 6	6	q
		V_{GS}=4 5V	I_D=10A		7 8	9	q
D a -S c D d F a d V a	V_{SD}	V_{GS}=0V	I_S=1A			1 2	V
I Ca ac a c	C	V_{DS}=25V =1 0MH	V_{GS}=0V		2200		F
O Ca ac a c	C				265		
R T a Ca ac a c	C				145		
Ga a c	R	V_{GS}=0V =1MH	V_{DS}=0V		2 1		q
T a Ga C a	Q (10V	V_{GS}=10V I_D=20A	V_{DS}=20V		41		C
T a Ga C a	Q (4 5V				9 8		
Ga S c C a	Q				4 2		
Ga D a C a	Q d				4 9		

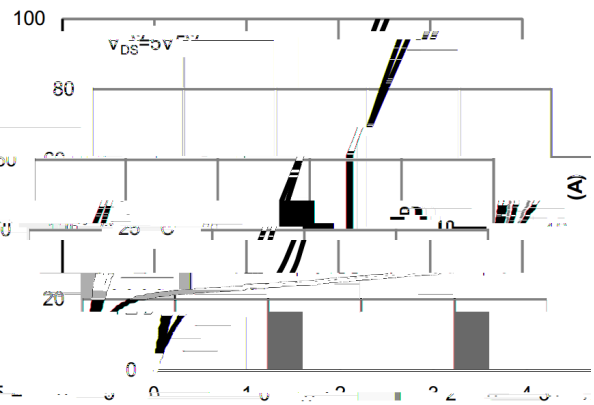
: b c c

Pa a	S b	T C d	M	T	Ma	U
T -O D a T	d(	V_{GS}=10V V_{DS}=20V I_D=20A R_{GEN}=3 3q		11		
T -O R T				69		
T -O D a T	d(			39		
T -O Fa T				9 3		



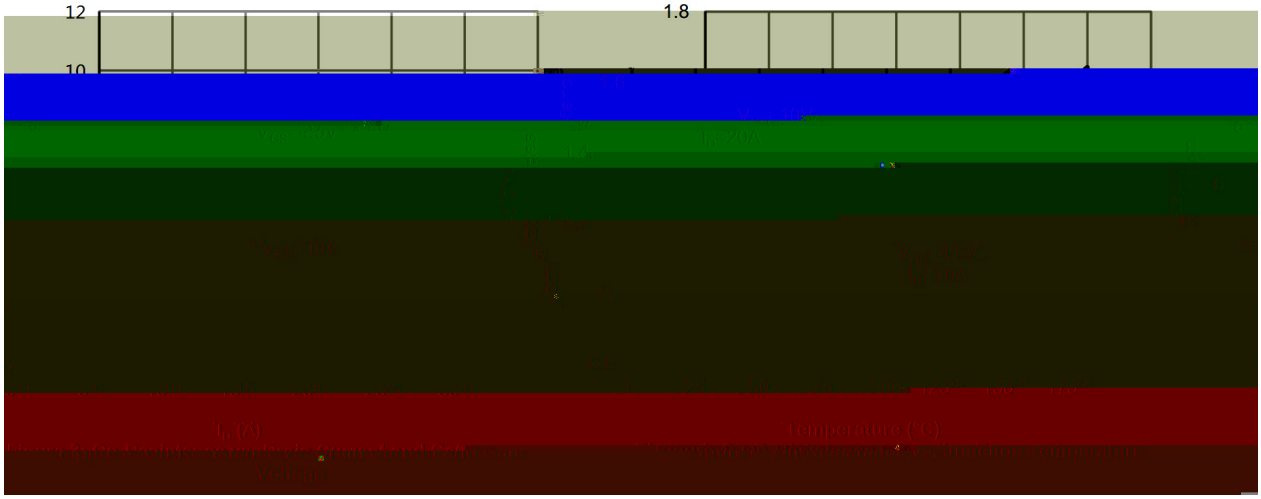
V_{GS} (Volts)

Figure 2: Transfer Characteristics



V_{DS} (Volts)

Figure 1: On-Region Charac



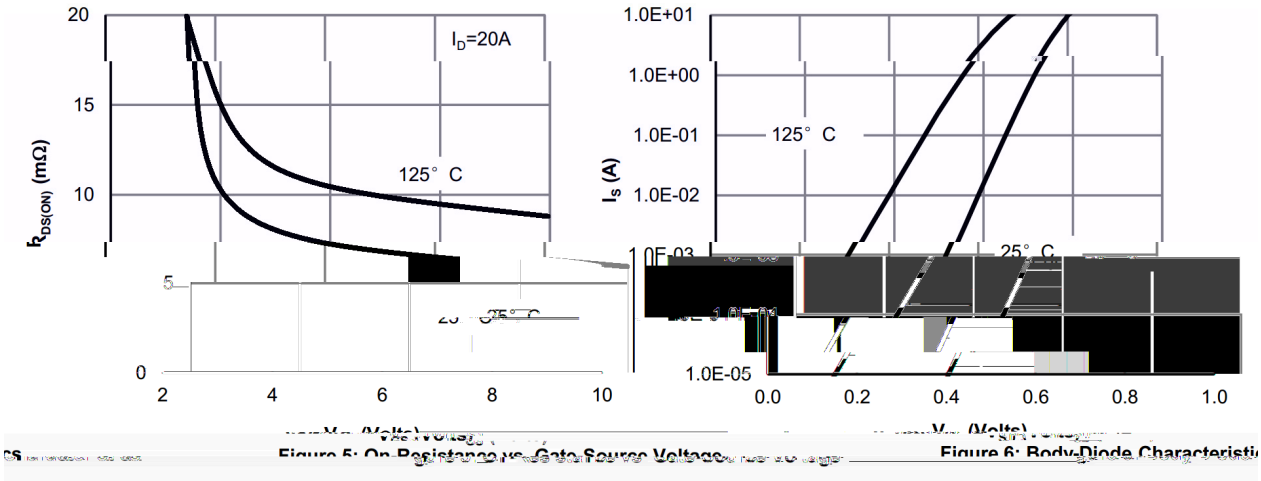


Figure 5: On-Resistance vs. Gate-Source Voltage

Figure 6: Body-Diode Characteristi

: b c c

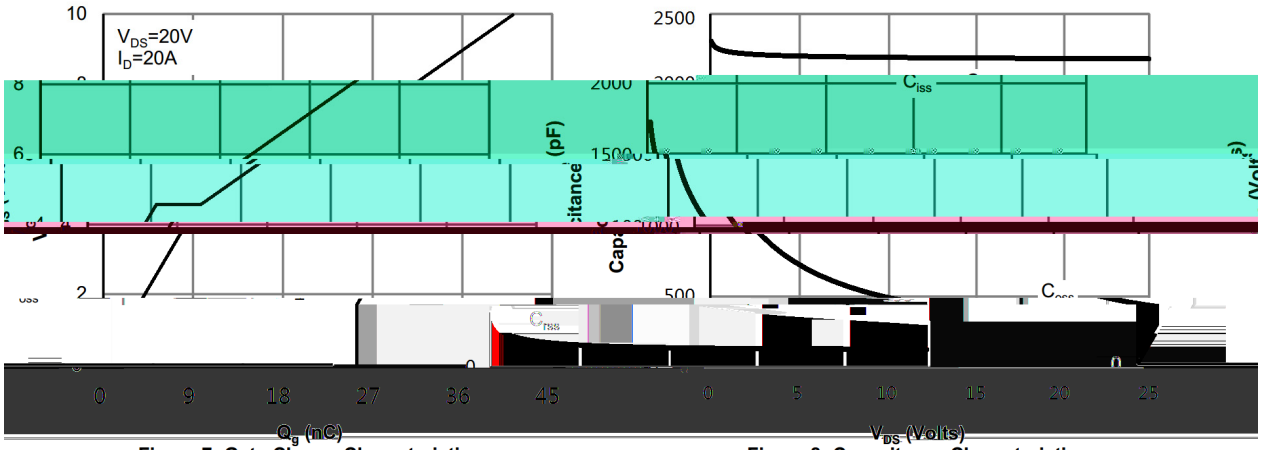


Figure 7: Gate-Charge Characteristics

Figure 8: Capacitance Characteristics

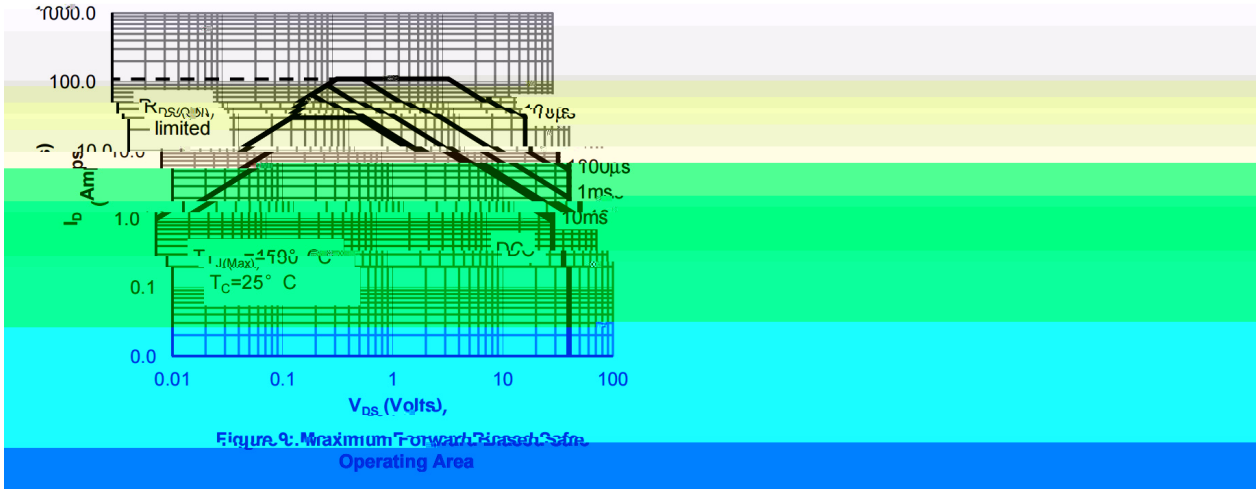


Figure 9: Maximum Forward Biased Safe Operating Area

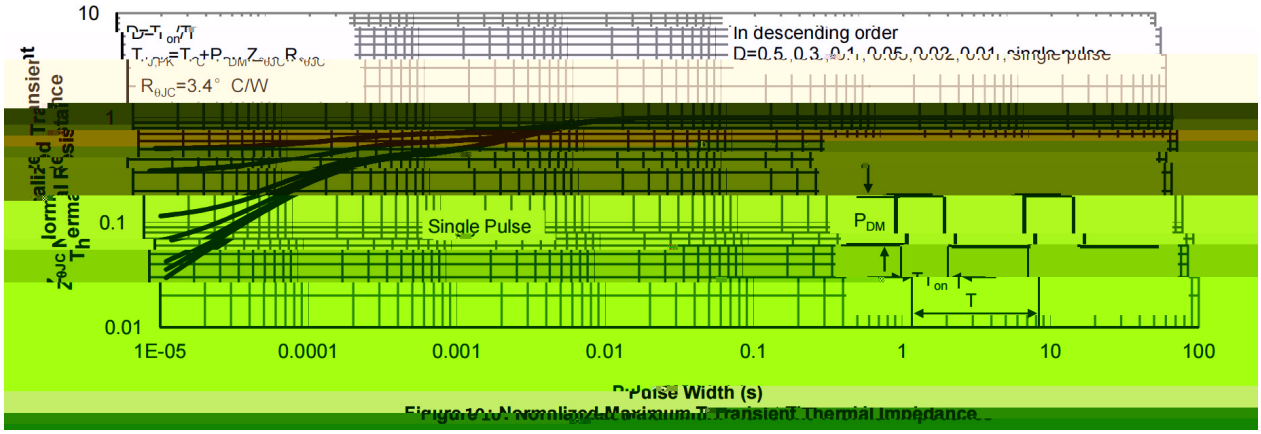
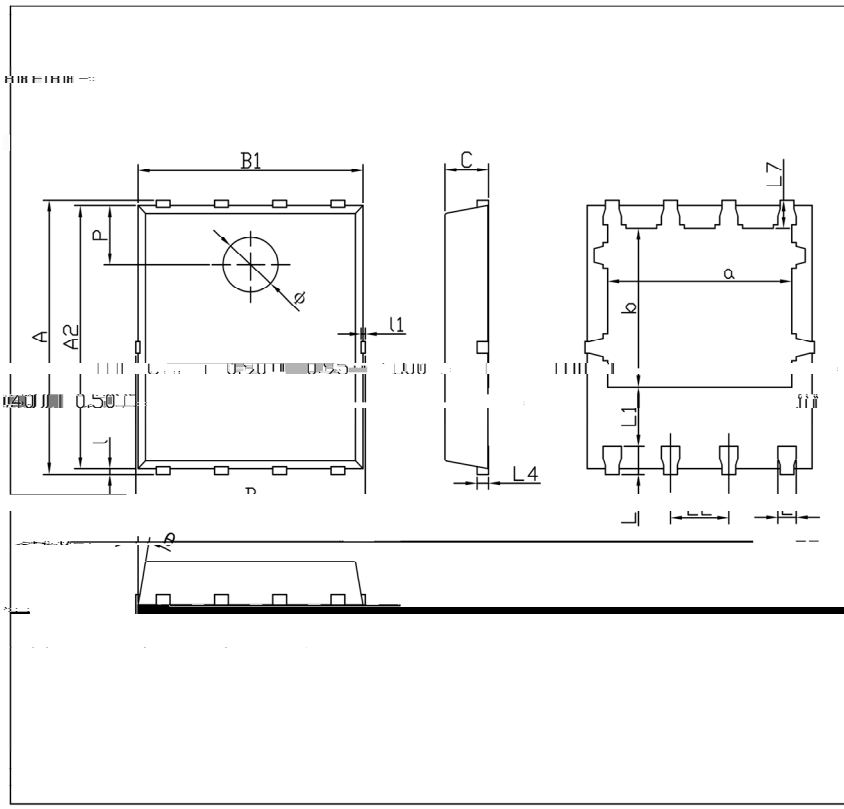


Figure 10: Normalized Maximum Transient Thermal Impedance

PDFN5×6 Unit:mm



Millimeters			
Symbol	MIN	TYP	MAX
A	5.90	6.00	6.10
a	3.91	4.01	4.11
A2	5.70	5.75	5.80
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
[illegible]	[illegible]	[illegible]	[illegible]
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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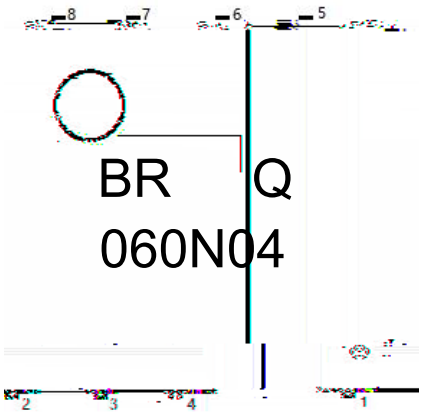
: b cc



BR

Q

060N04

****

N

BR C a C d

Q: A b a - d c C d

060N04 P d c T C d

: L N C d , c d c a L N

Temperature Profile for IR Reflow Soldering(Pb-Free)

N :

1 150 200 60 120 c; 1 P a :150 200 , T :60 120 c

2 255±5 5±0 5 c; 2 P a T :255±5 , D a :5±0 5 c

3 2 10 c 3 C S d: 2 10 c

260±5 10±1 c T :260 5 T :10 1 c

REEL

Pac a T

: b c c