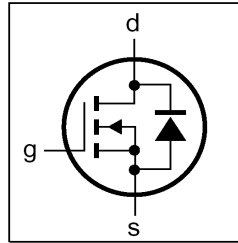


# BLV40N20

N-channel Enhancement Mode Power MOSFET

Preliminary  
 SEP. 2009

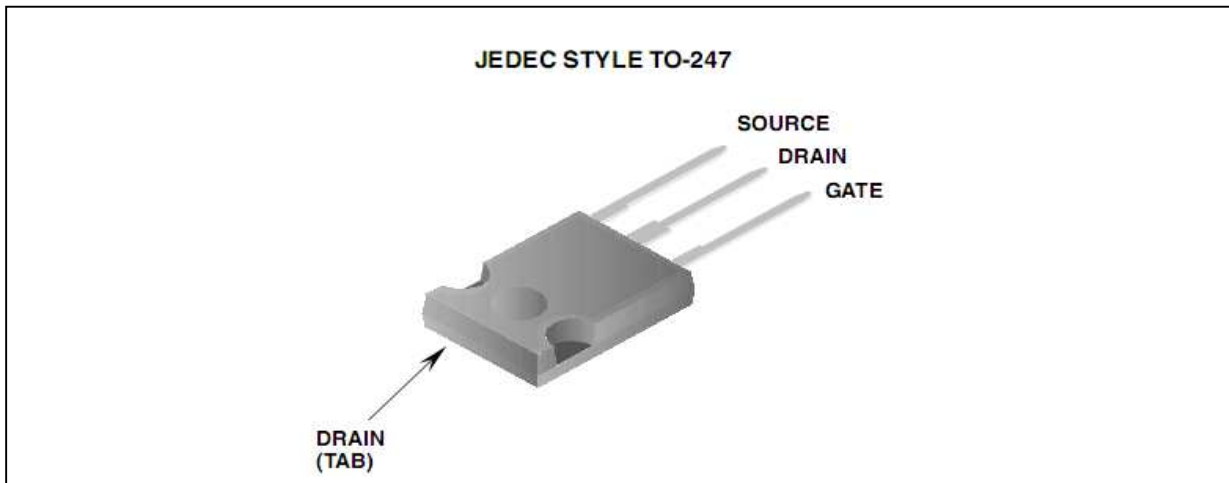
- 低导通电阻
- 低反向传输电容
- 驱动简单



$BV_{DSS}$	200V
$R_{DS(ON)}$	50mΩ
$I_D$	40A

## 产品介绍

200V 40A 大功率 VDMOS 器件，导通电阻小、驱动简单，适合 PDP 驱动电路使用



## 最大额定参数 (T<sub>c</sub>=25°C 除非另有说明)

符号	参数	极限值	单位
$V_{DS}$	源漏电压	200	V
$V_{GS}$	栅源电压	± 30	V
$I_D$	连续漏极电流	40	A
	脉冲漏极电流 (注释 1)	160	A
$I_{DR}$	体二极管连续漏极电流	40	A
	体二极管脉冲漏极电流(注释 1)	160	A

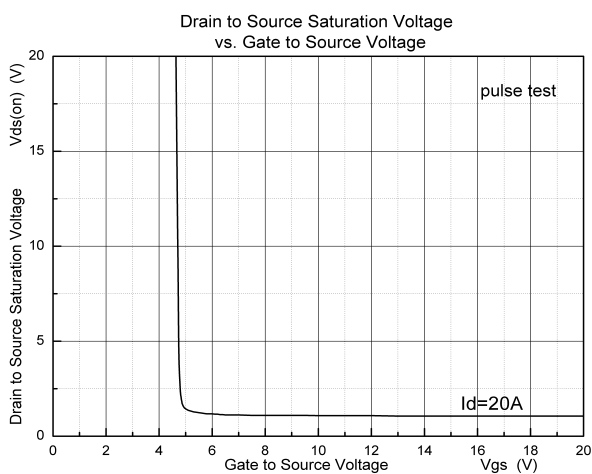
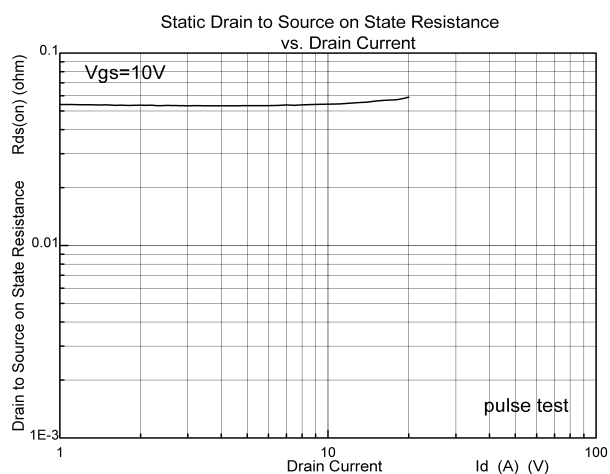
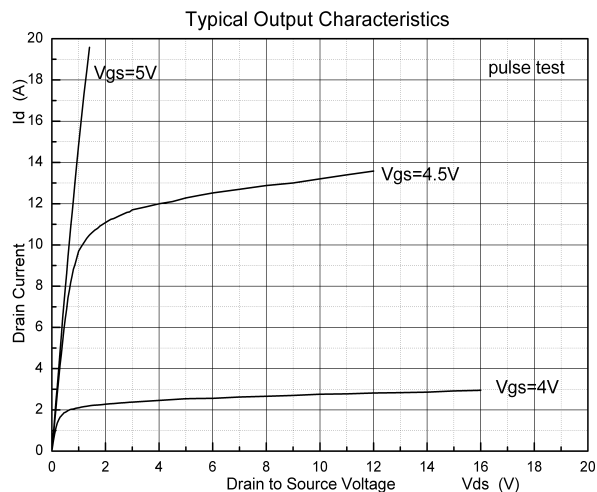
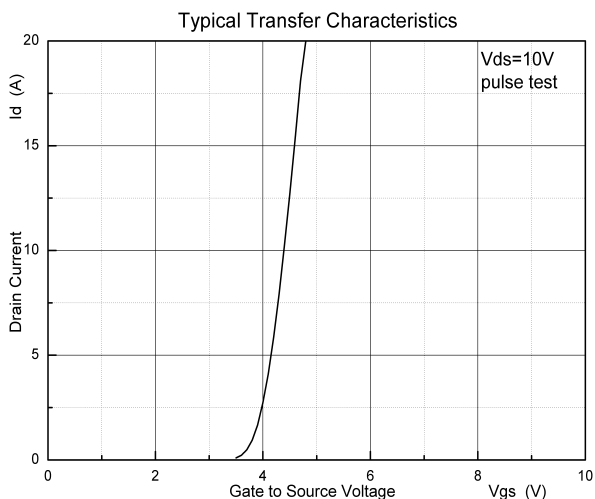
注释: 1. 脉冲宽度  $PW \leq 10\mu s$ , 占空比  $duty\ cycle \leq 1\%$

# BLV40N20

## 电学参数 ( $T_C=25^\circ\text{C}$ 除非另有说明)

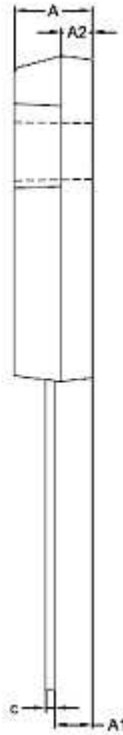
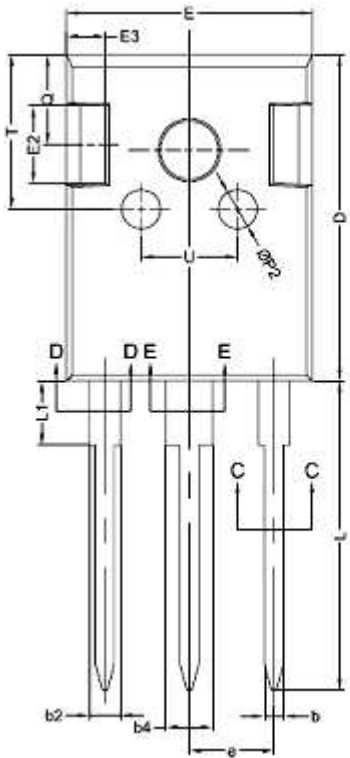
符号	参数	测试条件	最小	典型	最大	单位
$BV_{DSS}$	源漏击穿电压	$V_{GS}=0V, I_D=1mA$	200	220	-	V
$R_{DS(ON)}$	导通电阻	$V_{GS}=10V, I_D=20A$	-	0.047	0.055	$\Omega$
$V_{GS(th)}$	开启电压	$V_{DS}=V_{GS}, I_D=250\mu A$	2	3	4	V
$I_{DSS}$	源极-漏极漏电流	$V_{DS}=200V, V_{GS}=0V$	-	-	10	$\mu A$
$I_{GSS}$	栅极-源极漏电流	$V_{GS}=\pm 20V$	-	-	$\pm 100$	nA
$C_{iss}$	输入电容	$V_{DS}=25V$ $V_{GS}=0V$ $f=1MHz$	-	2300	-	pF
$C_{oss}$	输出电容		-	450	-	pF
$C_{rss}$	反向传输电容		-	80	-	pF

## 典型曲线



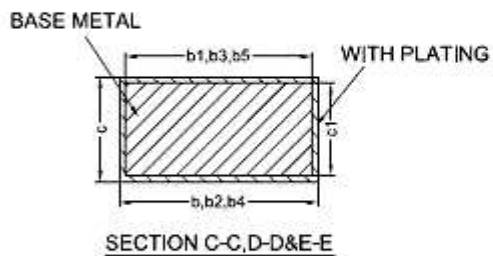
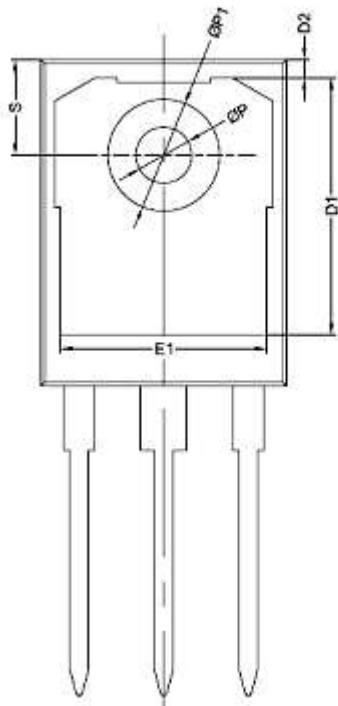
封装外形图

TO247



COMMON DIMENSIONS  
(UNITS OF MEASURE=MILLIMETER)

SYMBOL	MIN	NOM	MAX
A	4.90	5.00	5.10
A1	2.31	2.41	2.51
A2	1.90	2.00	2.10
b	1.16	-	1.26
b1	1.15	1.2	1.22
b2	1.96	-	2.06
b3	1.95	2.00	2.02
b4	2.96	-	3.06
b5	2.95	3.00	3.02
c	0.59	-	0.66
c1	0.58	0.60	0.62
D	20.90	21.00	21.10
D1	16.25	16.55	16.85
D2	1.05	1.20	1.35
E	15.70	15.80	15.90
E1	13.10	13.30	13.50
E2	4.90	5.00	5.10
E3	2.40	2.50	2.60
e	5.44BSC		
L	19.80	19.92	20.10
L1	-	-	4.30
P	3.50	3.60	3.70
P1	-	-	7.40
P2	2.40	2.50	2.60
Q	5.60	-	6.00
S	6.15BSC		
T	9.80	-	10.20
U	6.00	-	6.40



- NOTES:  
 1. ALL DIMENSIONS REFER TO JEDEC STANDARD TO-247 AD DO NOT INCLUDE MOLD FLASH OR PROTRUSIONS.  
 2. EJECTION MARK DEPTH  $0.10^{+0.15}_{-0.05}$