5 é / Descriptions

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N-Channel Enhancement Mode Field Effect Transistor in a DFN2×2B-6LPlastic Package.

¤ ª / Features

V_{DS} (V) =20V I_D =8A (V_{GS} = f 12V)

$R_{DS(ON)}$@10V<14m (Typ. 12m)

$R_{DS(ON)}$@4.5V<20m (Typ. 15m)

—)í D } oŽHF Product.

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Suited for low voltage applications such as automotive, DC/DC Converters, and high efficiency switching for power management in portable and battery operated products.

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See Marking Instructions.

@ *f* Parameter		… Z Symbol	*f* › Rating	% y Unit
Drain-Source Voltage		V_{DSS}	20	V
Drain Current		I_D	8	A
Gate-Source Voltage		V_{GS}	±12	V
Avalanche Current		I_{AS}	12	A
Single Pulsed Avalanche Energy		E_{AS}	115	mJ
Power Dissipation		P	2.8	W
Junction Temperature Range		T_j	150	
Storage Temperature Range		T_{stg}	-55 150	
Maximum Junction-to-Ambient	t 0 10s	R ©JA	45	/W
	Steady-State	R ©JA	80	

@ *f* 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	20	22		V
Zero Gate Voltage Drain Current	I_{DSS}	V_{DS}=20V V_{GS}=0V			1.0	A
Gate-Body Leakage Current Forward	I_{GSS}	V_{GS}=±12V V_{DS}=0V			±0.1	A
Static Drain-Source On-Resistance	$R_{DS(on)}$	V_{GS}=10V I_D=8.0A		12	14	m
		V_{GS}=4.5V I_D=8.0A		15	20	m
		V_{GS}=2.5V I_D=8.0A		20	35	m
Gate Threshold Voltage	$V_{GS(th)}$	V_{DS}=V_{GS} I_D=250 A	0.4	0.6	1.2	V
Drain-Source Diode Forward Voltage	V_{SD}	V_{GS}=0V I_F=1.0A		0.7	1.35	V
Signal Source Resistance	Rg	F=1MHz		3.3		
Input Capacitance	C_{iss}	V_{DS}=10V V_{GS}=0V f=1.0MHz		865		pF
Output Capacitance	C_{oss}			105		
Reverse Transfer Capacitance	C_{rss}			55		
Turn-On Delay Time	$t_{d(on)}$	V_{DS}=10V V_{GS}=4.5V R_L=1.25 R_{GEN}=3		2.7		ns
Turn-On Rise Time	t_r			3		

@ *f*

Ô ? d • Ž ¢ / Electrical Characteristic Curve

Ø ¤ =) ¢ / Package Dimensions

, M y ƒ / Marking Instructions

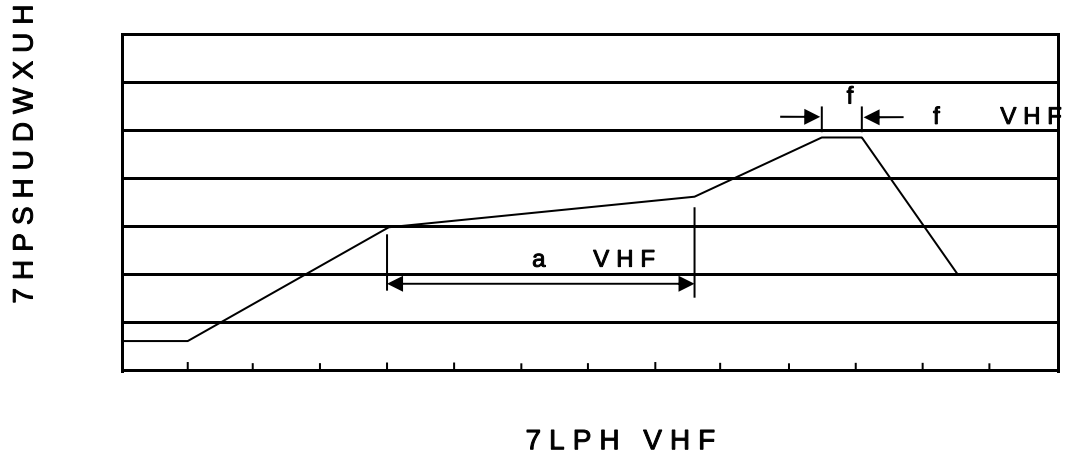
BR
120N02L
****

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BR y	¸ [W A
120N02L y	º Z W A
**** y	ÿ D Z W A k š ÿ D Z J

Note:

BR:	Company Code
120N02L:	Product Type Code
****:	Lot No. Code, code change with Lot No.

š WD t … • Ž ¢ (x /) / :K S V K X G Z [X K 6 X U L O R K L U X / 8 8 K L R U] 9 U R J K X O T M 6



7LPH VHF

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Note:

1o• Ä ½ “ † 150 ½180 - k ž • 60 ½90sec;

1.Preheating:150~180 - , Time:60~90sec.

2o• Q › “ † 245 r5 - k ž • 4 Ò 5 r0.5sec;

2.Peak Temp.:245 r5 - , Duration:5 r0.5sec.

3o•D N ò i Ò 0 , † 2 ½10 - /sec.

3. Cooling Speed: 2~10 - /sec.

ÂD /Cã p ¯ »] / Resistance to Soldering Heat Test Conditions

“ † y 260 r5 - ž • y 10 r1 sec. Temp.:260±5 Time:10±1 sec

G P á / Packaging SPEC.

2 & x / REEL

Package Type 7>û ˜ E	Units ;>û ¦H					Dimension ;>û p . (unit ÆEmm³)		
	Units/Reel / --	Reels/Inner Box -- /-	Units/Inner Box /-	Inner Boxes/Outer Box - /1ç	Units/Outer Box /1ç	Reel	Inner Box×	Outer Box1ç
DFN2×2B-6L	4,000	10	40,000	4	160,000	7!v ×8	210×205×205	445×435×230

„ Ð y ƒ / Notices

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