

5 é / Descriptions

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N-Channel Enhancement Mode Field Effect Transistor in a DFN2x2B-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 _{θJA}	45
	Steady-State	R _{θJA}	80

@ f Parameter	... Z Symbol	y i Ú ^ Test Conditions	Â 4 › Min	Á ° › 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	R _g	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)}			2.7		
Turn-On Rise Time	t _r	V _{DS} =10V R _L =1.25 V _{GS} =4.5V R _{GEN} =3		3		ns

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Ô ? d • Ž ¢ / Electrical Characteristic Curve

Ø □ =) ϕ / Package Dimensions

, M y f / Marking Instructions

BR 120N02L *****

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Note:

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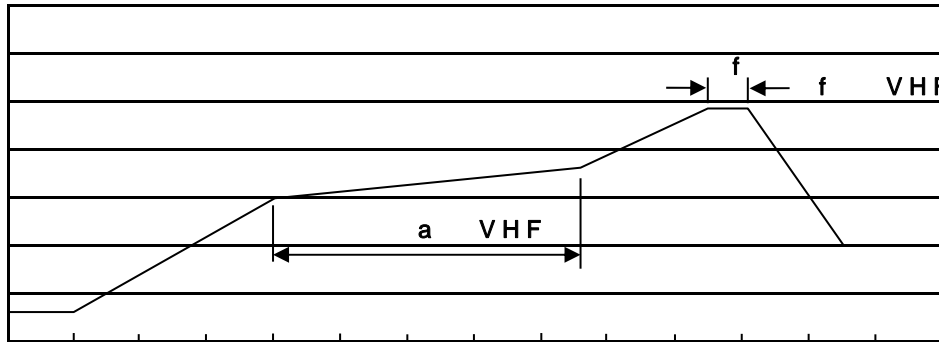
Company Code

Product Type Code

Lot No. Code, code change with Lot No.

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7HPSHUDWXUH



7LPH VHF

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

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

3o•D N ò i Ò 0 , † 2 ½10 - /sec.

Note:

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

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

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 Åmm³)		
	Units/Reel /--	Reels/Inner Box -- /-	Units/Inner Box /-	Inner Boxes/Outer Box - /!ç	Units/Outer Box /!ç	Reel	Inner Box	Outer Boxç
DFN2x2B-6L	4,000	10	40,000	4	160,000	7!v x8	210x205x205	445x435x230

„Đ y f / Notices

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