

BRCS250N10SYM

Rev.A Jun.-2024

/ Descriptions

PDFN5×6A N

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

/ Features

V_{DS} (V) =100V I_D =30A ($V_{GS} = \pm 20V$)

$R_{DS(ON)}$ @10V≤25mR(Typ.20mR)

$R_{DS(ON)}$ @4.5V≤35mR(Typ.25mR)

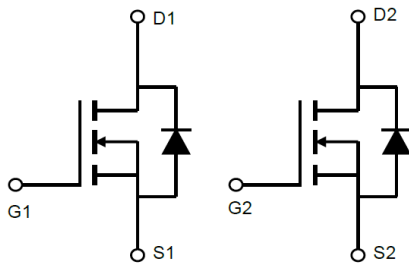
HF Product.

/ Applications

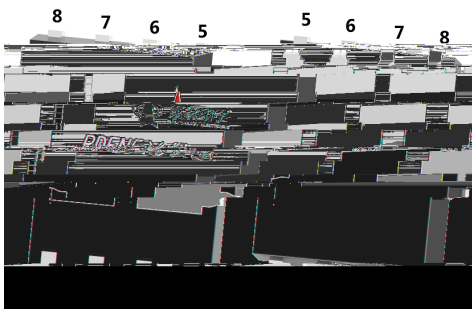
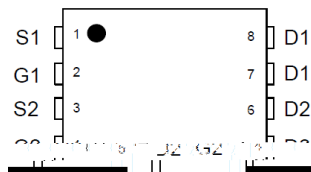
DC/DC

DC/DC Converter, Ideal for high-frequency switching and synchronous rectification.

/ Equivalent Circuit



/ Pinning



/ Marking

See Marking Instructions.

Parameter	Symbol		Unit
	Symbol	Rating	
Drain-Source Voltage	V_{DS}	100	V
Drain Current	$I_D(T_c=25^\circ\text{C})$	30	A
Drain Current - Pulsed	I_{DM}	113	A
Gate-Source Voltage	V_{GS}	± 20	V
Avalanche Current	I_{AS}	7	A
Single Pulsed Avalanche Energy	E_{AS}	24.5	mJ

Power Dissipation

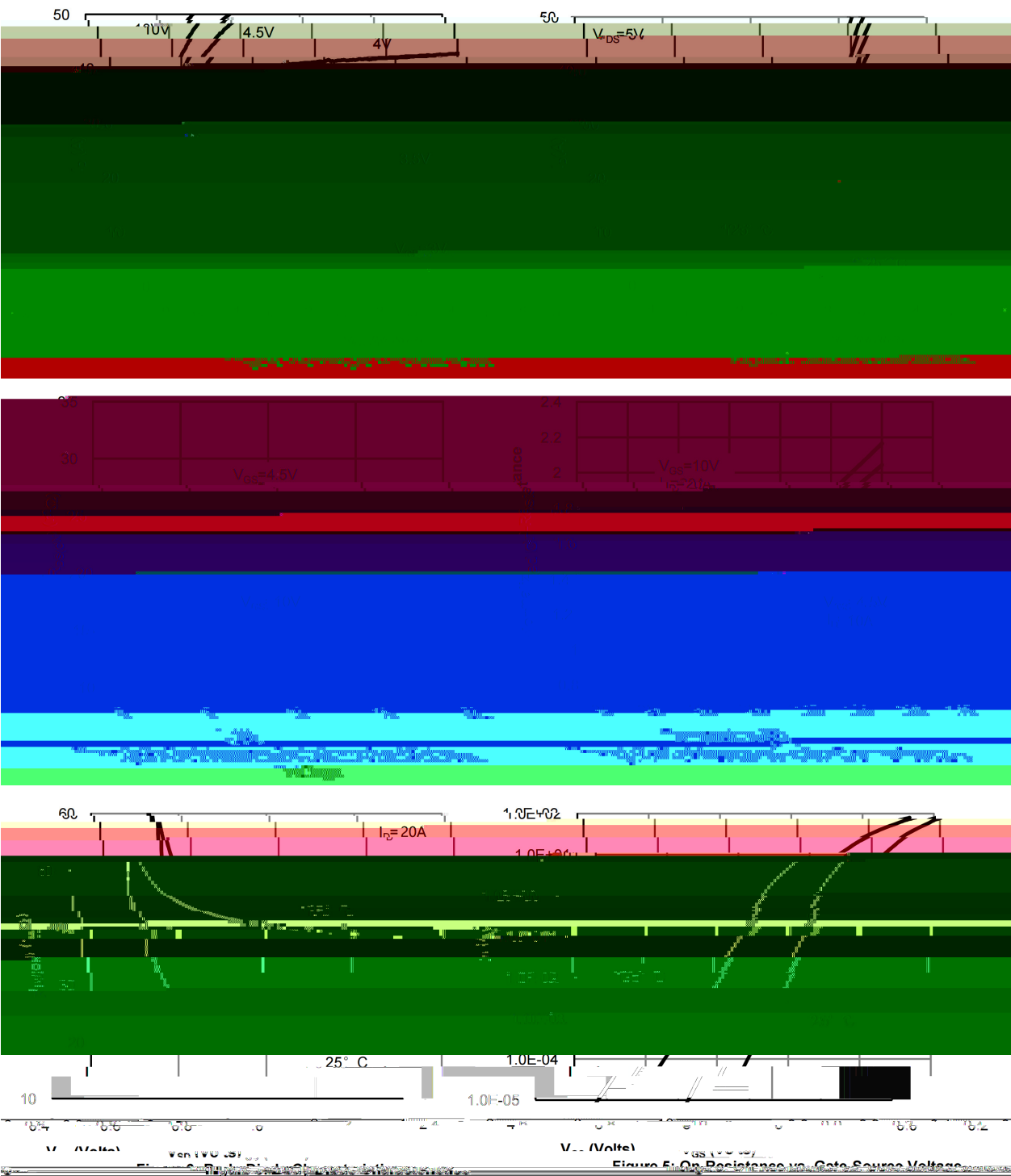
$P(T_c=25^\circ\text{C})$

Parameter

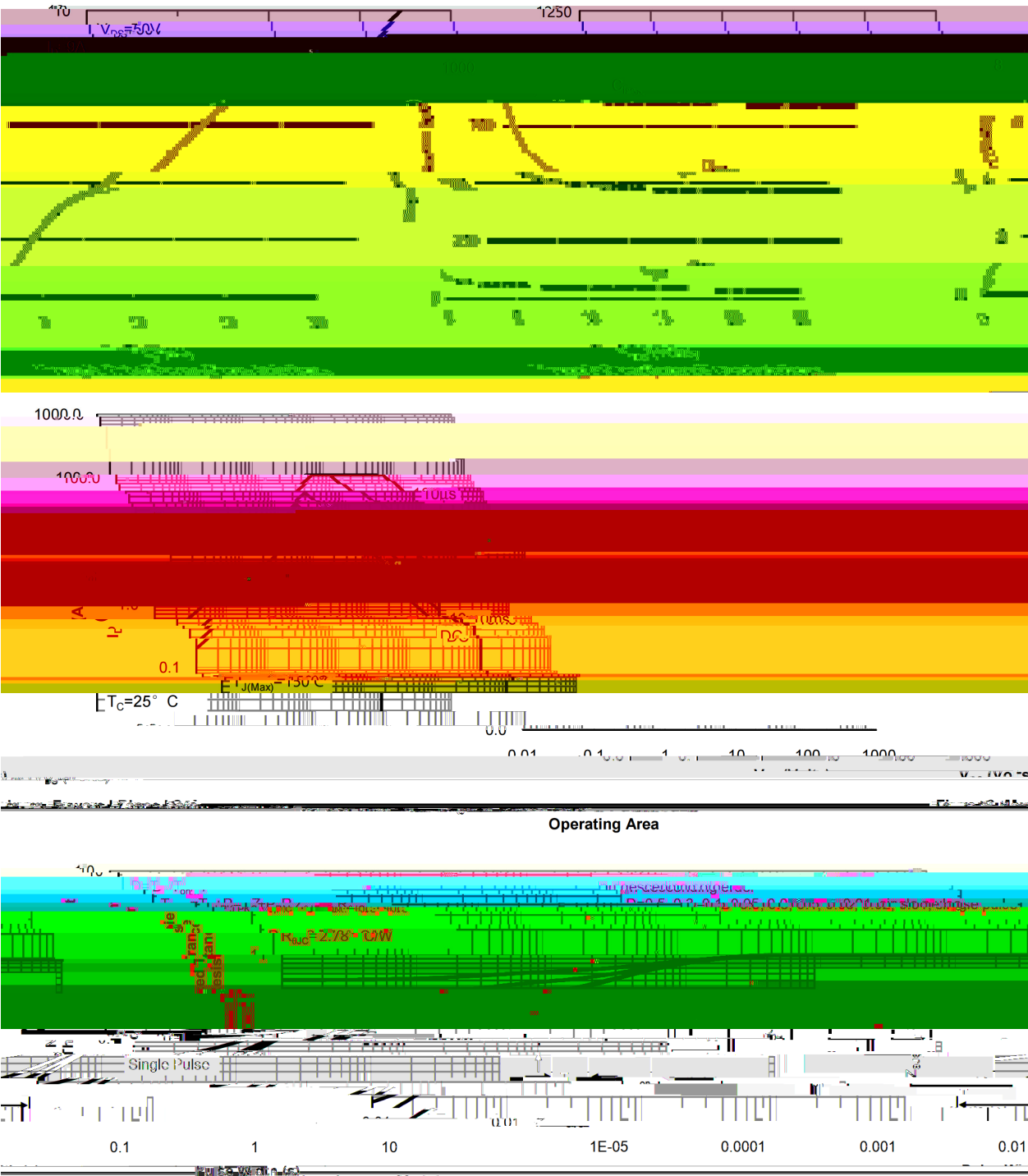
/ Electrical Characteristics(Ta=25)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Turn-On Delay Time	$t_{d(on)}$	$V_{GS}=10V$ $V_{DS}=50V$ $R_L=5.5\Omega$ $R_{GEN}=3.0\Omega$		5		ns
Turn-On Rise Time	t_r			3.2		
Turn-Off Delay Time	$t_{d(off)}$			21		
Turn-Off Fall Time	t_f			3		

/ Electrical Characteristic Curve



/ Electrical Characteristic Curve



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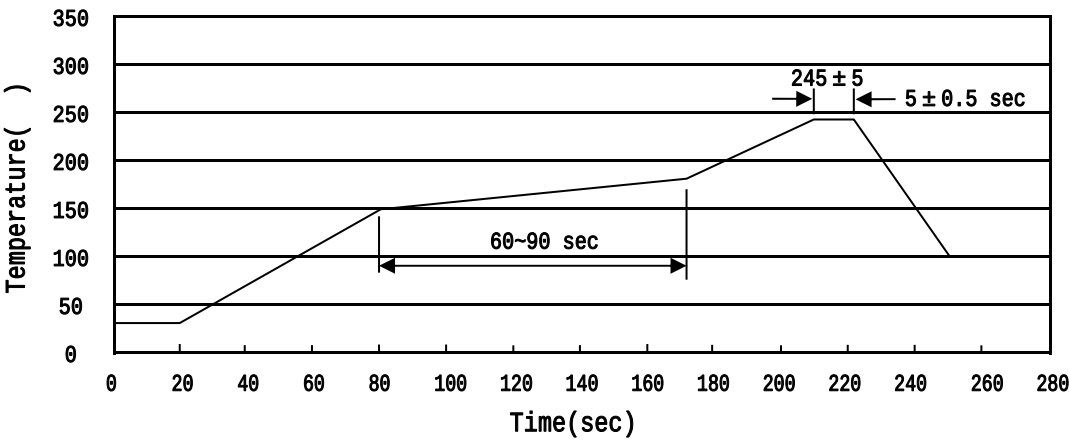
/ Marking Instructions



BR	
250N10S	

Note	
BR	Company Code
250N10S	Product Type Code
****:	Lot No. Code, code change with Lot No

() / Temperature Profile for IR Reflow Soldering(Pb-Free)



Note:

- 1

150 180

60 90sec;

1.Preheating:150~180 , Time:60~90sec.
- 2

245±5

5±0.5sec;

2.Peak Temp.:245±5 , Duration:5±0.5sec.
- 3

2 10

/sec.

3. Cooling Speed: 2~10 /sec.

/ Resistance to Soldering Heat Test Conditions

260±5 10±1 sec. Temp.:260±5 Time:10±1 sec

/ Packaging SPEC.

/ REEL

Package Type	Units					Dimension (unit mm ³)		
	Units/Reel /	Reels/Inner Box /	Units/Inner Box /	Inner Boxes/Outer Box /	Units/Outer Box /	Reel	Inner Box	Outer Box
PDFN5×6A	5,000	2	10,000	6	60,000	13"×12	360×360×50	380×335×366

/ Notices