/ Revised rec

A	2021.06.22	All	AOS-AONS66923		

/ Descriptions

PDFN5*6 N

N-Channel MOSFET in a PDFN5*6 Plastic Package .

/ Features

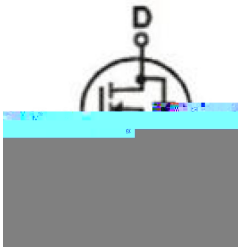
Low $R_{DS(ON)}$ to minimize conductive loss;low Gate Charge for fast switching;Low Thermal resistance, HF Product.

/ Applications

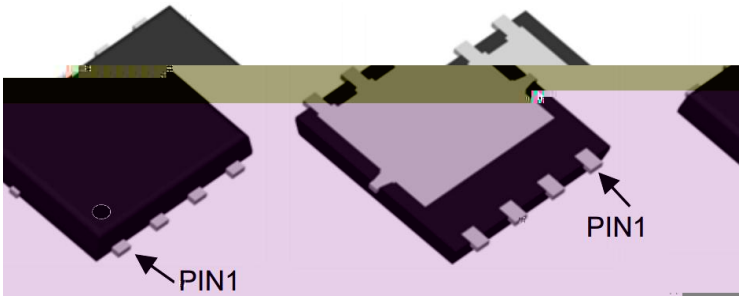
LED

For boost converters and synchronous rectifiers for consumer, telecom, industrial power supplies and LED backlighting.

/ Equivalent Circuit



/ Pinning



PIN1 2 3 S PIN4 G PIN5 6 7 8 D

Pin	极性
1	S
2	S
3	S
4	G
5	D
6	D
7	D
8	D

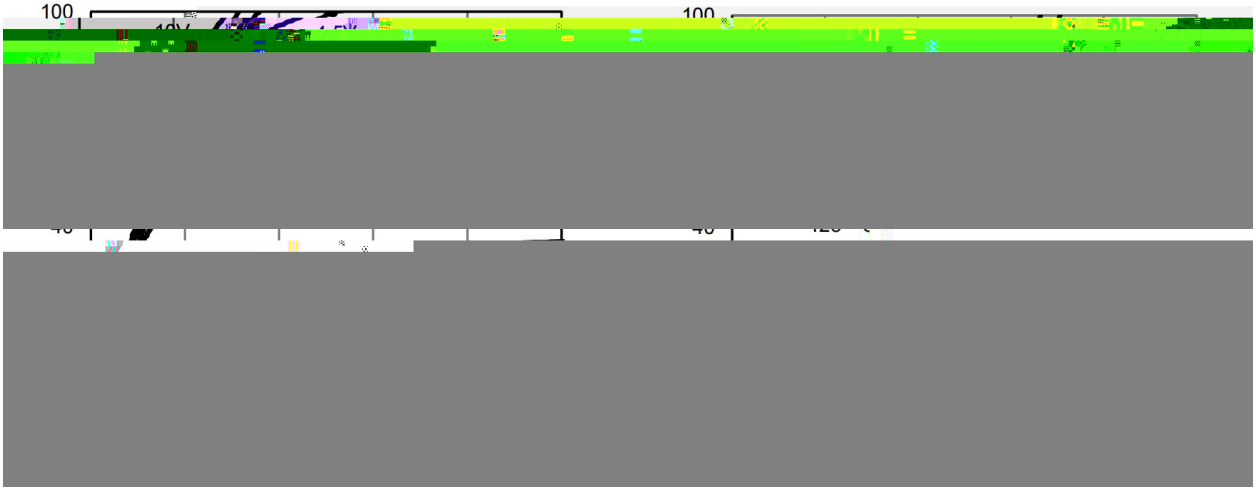
/ h_{FE} Classifications & Marking

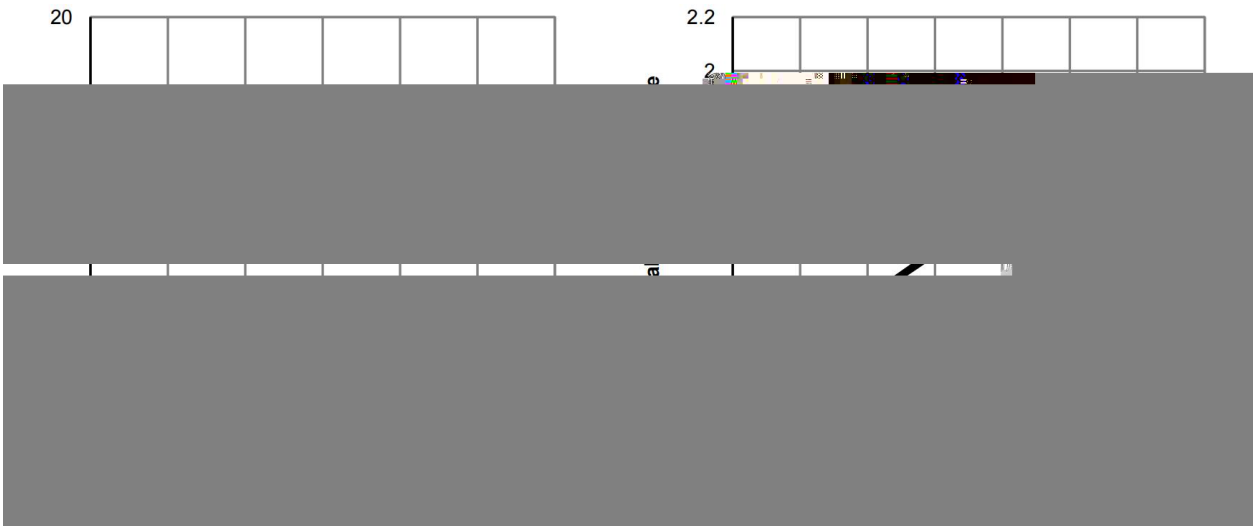
见印章说明 See Marking Instructions.

Parameter		Symbol	Rating	Unit
Drain-Source Voltage		V_{DS}	100	V
Drain Current - Continuous		I_D	47	A
Drain Current – Pulsed		I_{DM}	105	A
Gate-Source Voltage		V_{GS}	±20	V
Power Dissipation		$P_D(T_c=25℃)$	48	W
Single Pulse Avalanche Energy(L=0.5mH)		E_{AS}	78.7	mJ
Avalanche Current(L=0.5mH)		I_{AS}	15	A
Junction and Storage Temperature Range		T_j, T_{stg}	-55 to 150	℃
Thermal resistance, junction - ambient	t ≤ 10s	$R_{\theta JA}$	25	℃/ W
	Steady-State		55	
Thermal resistance, junction - case	Steady-State	$R_{\theta JC}$	2.6	

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Input Capacitance	C_{iss}	V_{DS}=25V V_{GS}=0V				

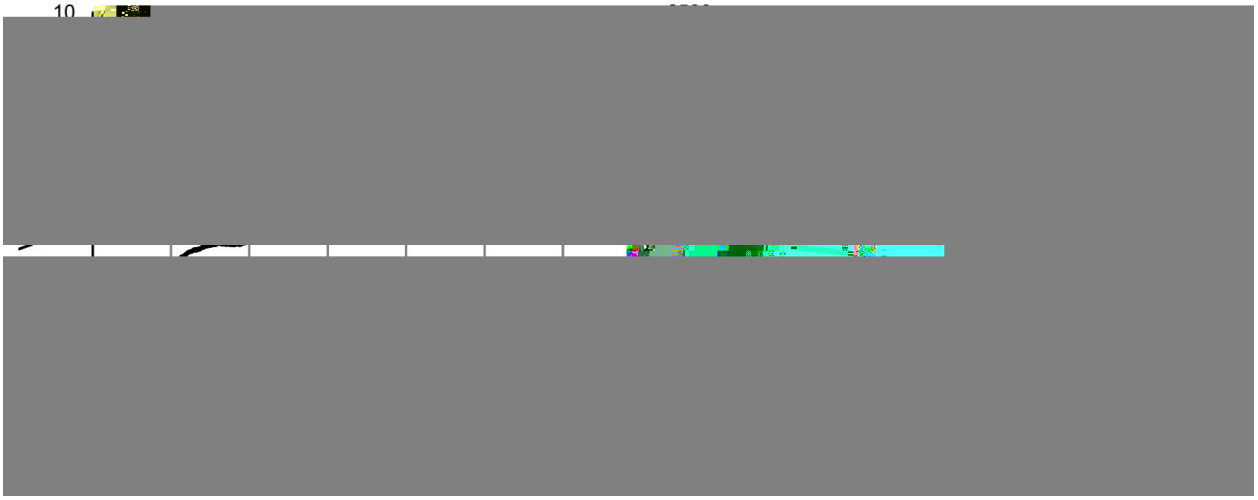
/ Electrical Characteristic Curve

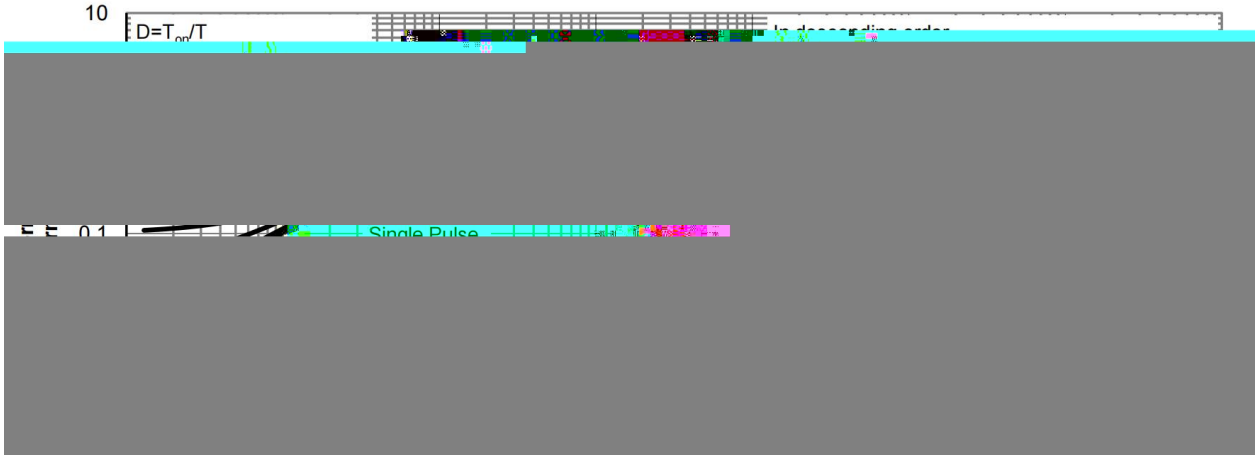




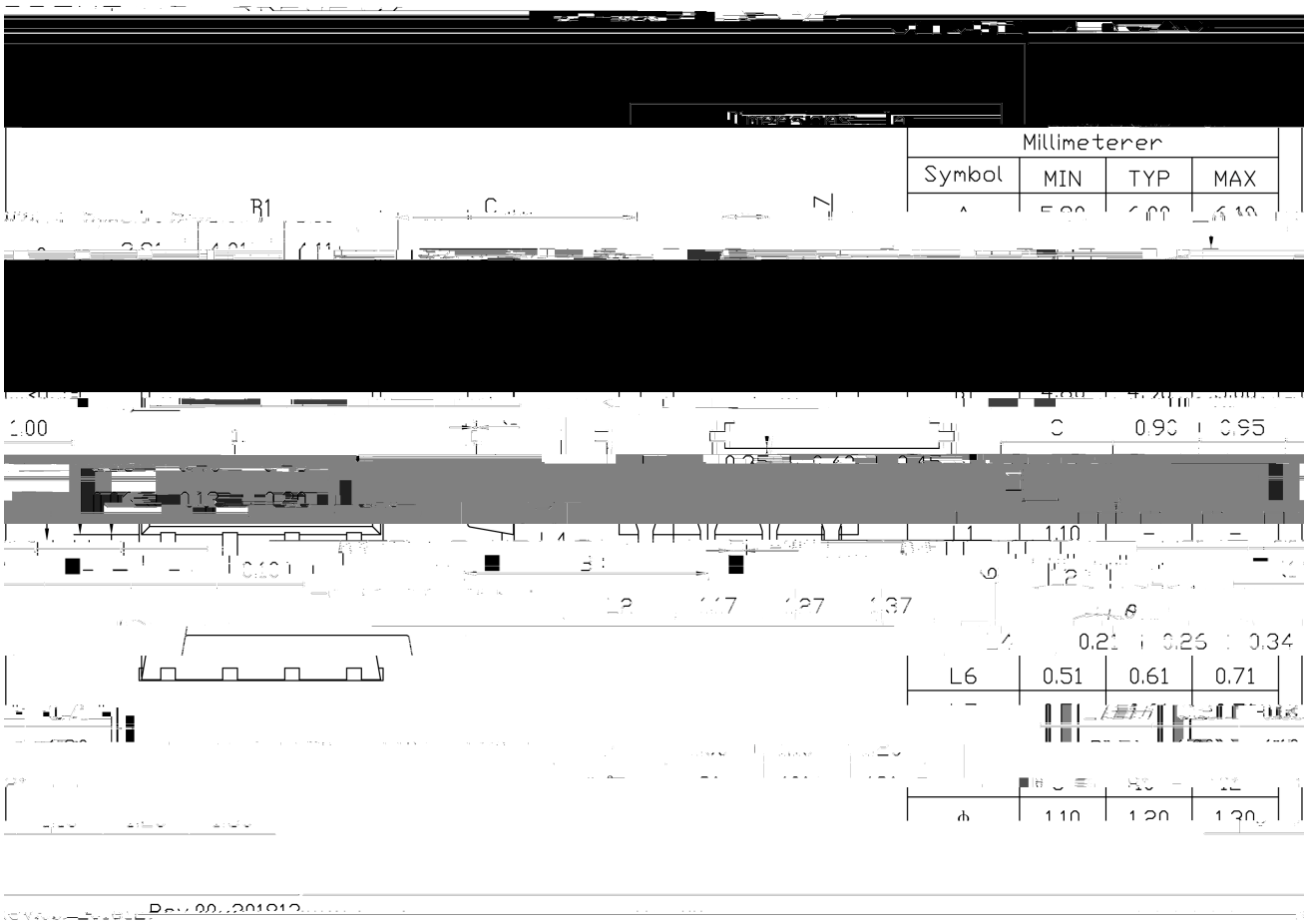


/ Electrical Characteristic Curve

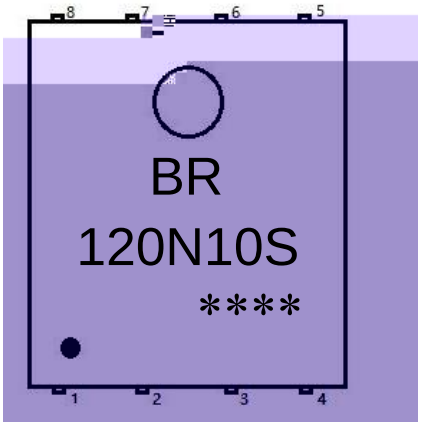




/ Package Dimensions



/ Marking Instructions



BR

120N10S

Note

BR	Company Code
120N10S	Product Type.

( ) / 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 包装数量	Dimension 包装尺寸 (unit: mm^3)