/ Revised record

F	2018-4				
G	2018-10-22				
H	2019-1-09	1			
I	2019-6-13		取消 RDSON@-20V/-10A 的项目		
J	2022-1-10		VGSS=±20V 改为±25V; 特征栏和 IGSS 中 VGSS=±20V 改为±25V；极限参数中删除 E 描述。		
A	2022-2-25	ALL	AOS-AOSP21307 BRCS4407SC		

SOP-8 塑封封装 P 沟道 MOS 场效应管。
P-Channel Enhancement Mode Field Effect Transistor in a SOP-8 Plastic Package.

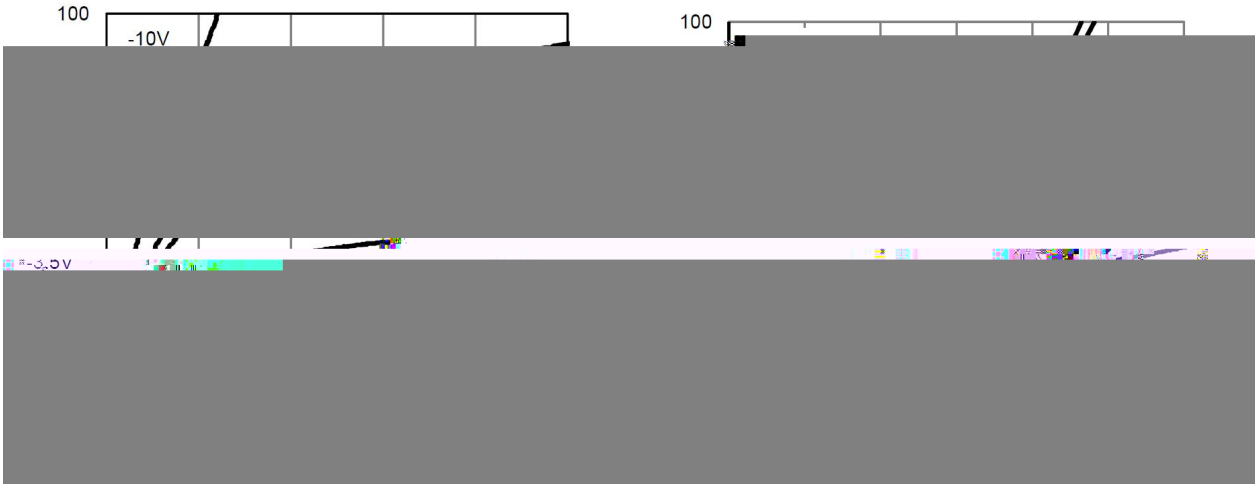
V_{DS} (V) = -30V
I_D = -14A (V_{GS} = ± 25v (

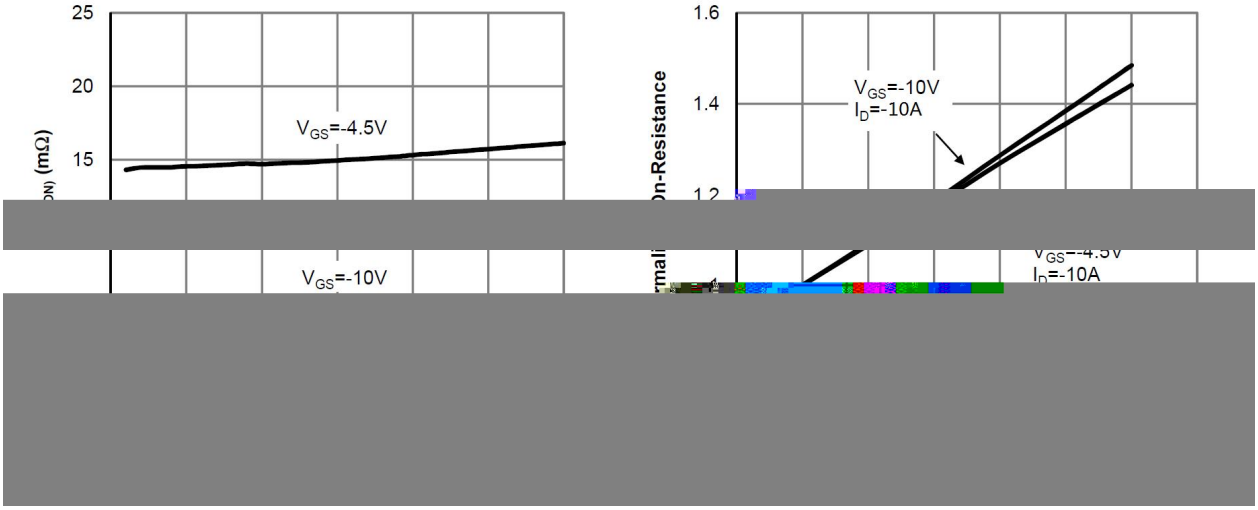
Parameter	Symbol	Rating	Unit
Drain-Source Voltage	V_{DSS}	-30	V
Gate-Source Voltage	V_{GSS}	±25	V
Continuous Drain Current	I_D (T_a=25°C)	-14	A
Pulsed Drain Current	I_{DM}	-56	A
Power Dissipation for Single Operation	P_D (T_a=25℃)	3.1	W
Maximum Junction Temperature	T_j	150	℃
Storage Temperature Range	T_{stg}	-55 150	℃

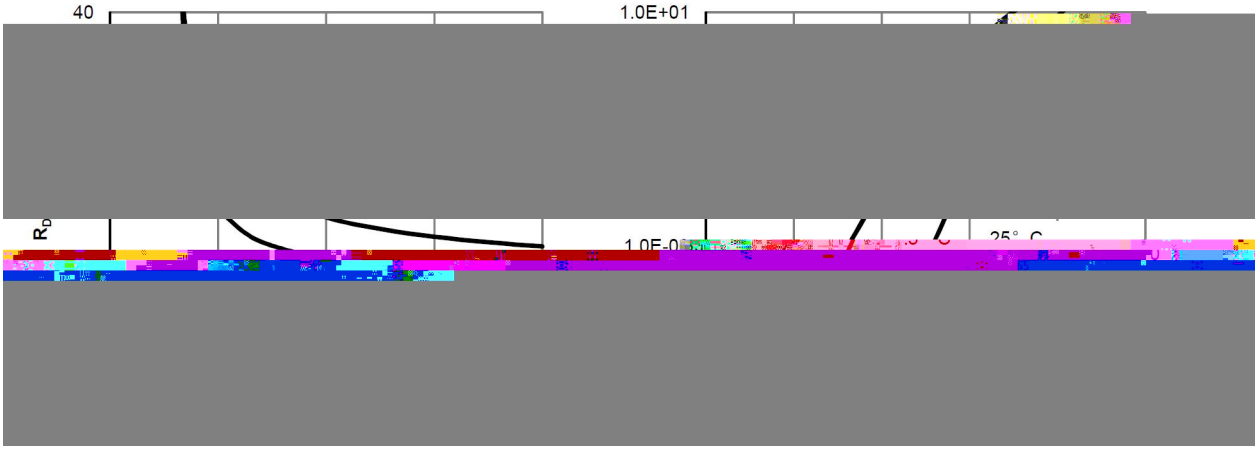
Thermal Resistance-

Parameter	Symbol	Test Conditions		Min	Typ	Max	Unit
Drain-Source Breakdown Voltage	BV_{DSS}	I_D=-250μA	V_{GS}=0V	-30			V
Zero Gate Voltage Drain Current	I_{DSS}	V_{DS}=-24V	V_{GS}=0V			-1.0	μA
Gate-Body leakage current	I_{GSS}	V_{DS}=0V	V_{GS}=±25V			±100	nA
Gate Threshold Voltage	$V_{GS(th)}$	V_{DS}=VGS	I_D=-250μA	-1.0	-1.5	-3.0	V
Static Drain-Source On-Resistance	$R_{DS(ON)}$	V_{GS}=-10V	I_D=-10A		11	14	mΩ
		V_{GS}=-4.5V	I_D=-10A		14	24	
Diode Forward Voltage	V_{SD}	I_S=-1A	V_{GS}=0V			-1.0	V
Total Gate Charge	$Q_{g(10V)}$	V_{GS}=-10V I_D=-14A	V_{DS}=-15V		35		nC
Total Gate Charge	$Q_{g(4.5V)}$				17		
Gate-Source Charge	Q_{gs}				5.7		
Gate-Drain Charge	Q_{gd}				8.8		
Gate Resistance	R_g	V_{GS}=0V f=1MHz	V_{DS}=0V		7		Ω
Input Capacitance	C_{iss}	V_{GS}=0V f=1MHz	V_{DS}=-25V		2210		pF
Output Capacitance	C_{oss}						

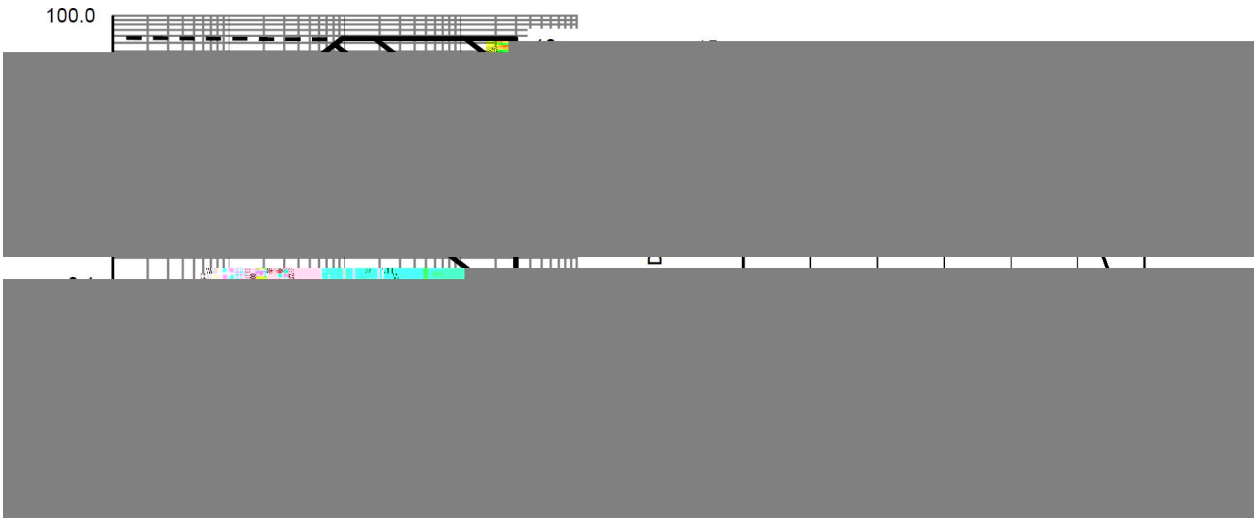
/ Electrical Characteristic Curve

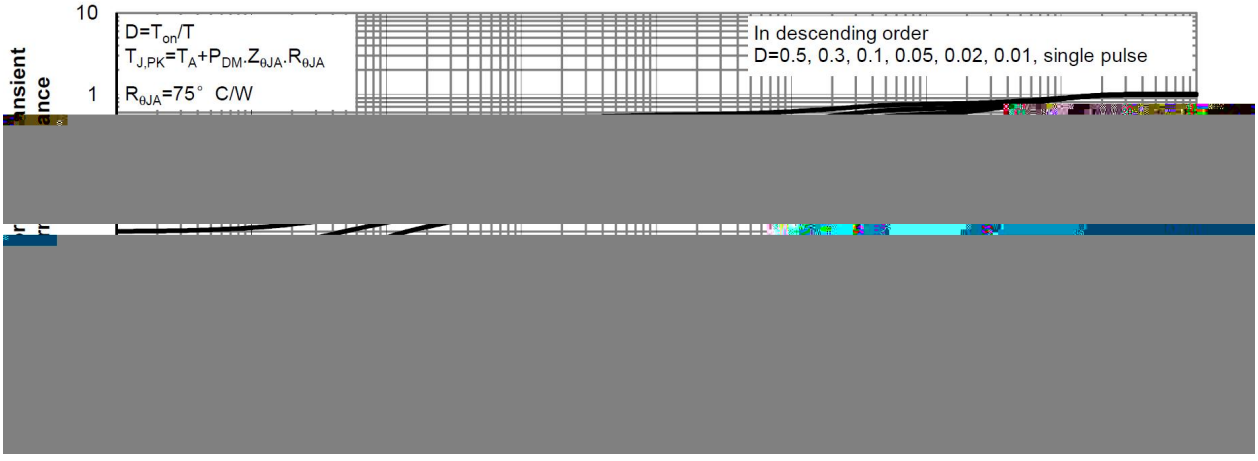






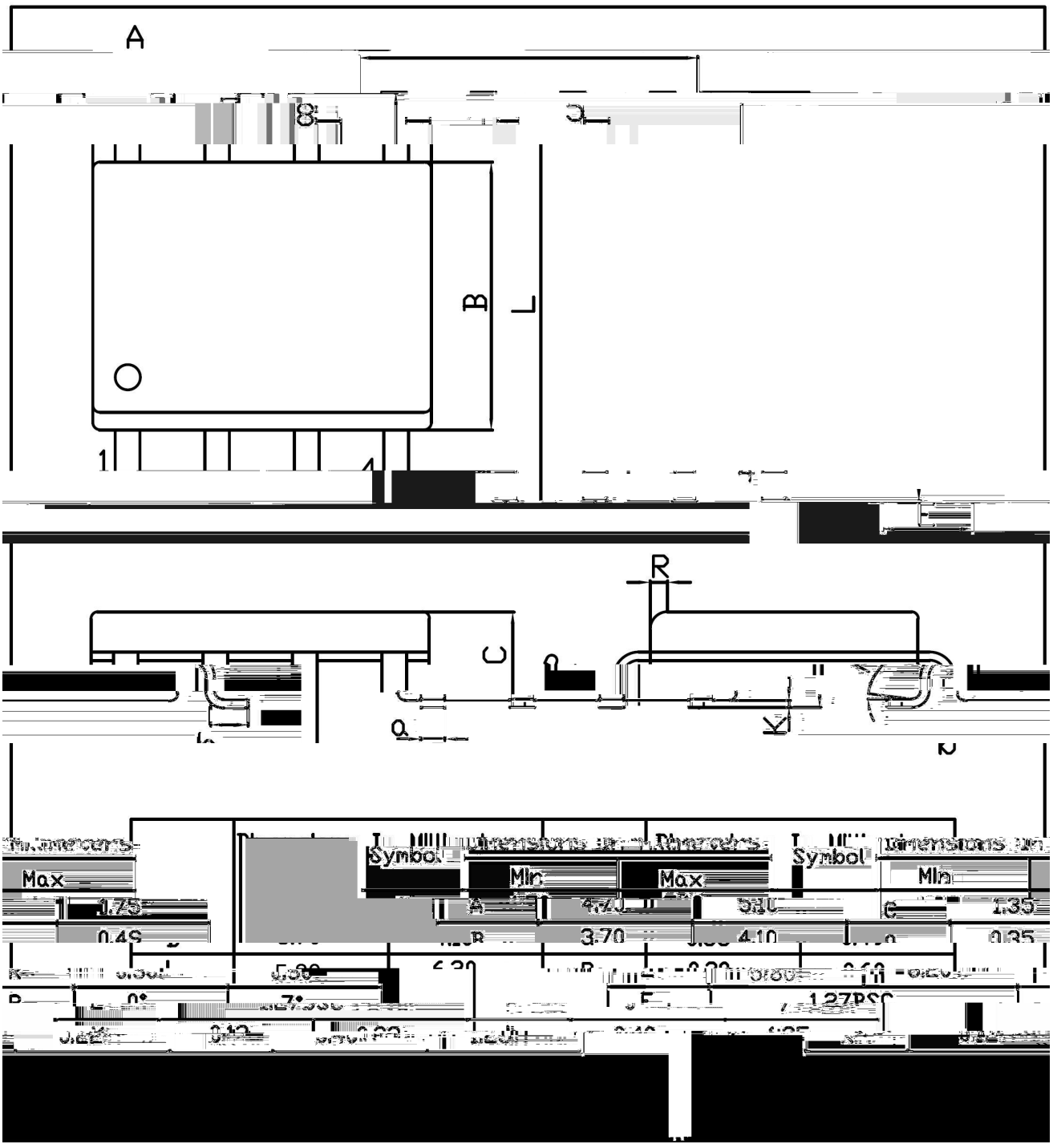
/ Electrical Characteristic Curve



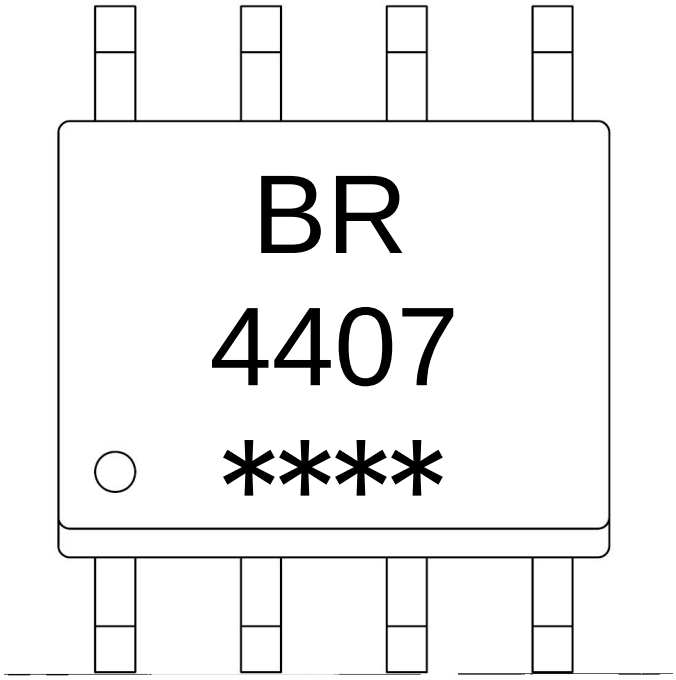


/ Package Dimensions

SOP-8 Unit:mm



/ Marking Instructions



BR

4407

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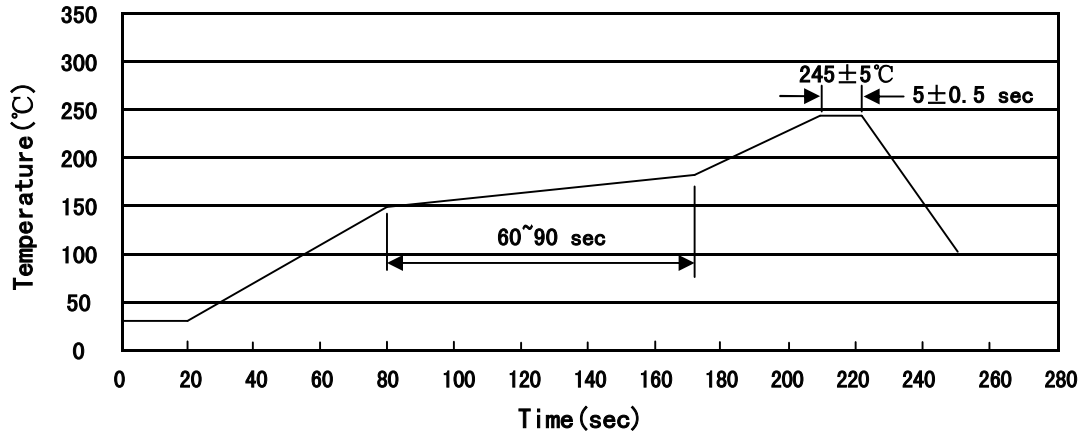
Note:

BR:	Company Code
4407:	Product Type
****:	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 封装形式	Units 包装数量					Dimension 包装尺寸 (unit: mm^3)		
	Units/Reel 只/卷盘	Reels/Inner Box 卷盘/盒	Units/Inner Box 只/盒	Inner Boxes/Outer Box 盒/箱	Units/Outer Box 只/箱	Reel	Inner Box 盒	Outer Box 箱
SOP/ESOP-8	4,000	2	8,000	6	48,000	13″ ×12	360×360×50	380×335×366

/ Notices