

2N6125

Rev.H Oct.-2018



DATA SHEET

وصف / Descriptions

TO-220

PNP

Silicon PNP transistor in a TO-220 Plastic Package.

المميزات / Features

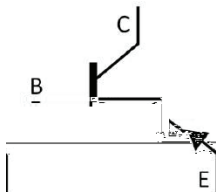
2N6122

Complement to 2N6122.

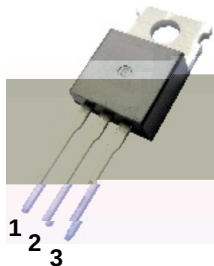
التطبيقات / Applications

Medium power linear switching applications.

الدائرة المكافئة / Equivalent Circuit



التوصيل / Pinning



PIN1 Base

PIN 2 Collector

PIN 3 Emitter

التصنيفات والتوسيم / h_{FE} Classifications & Marking

See Marking Instructions.

绝对最大值 / Absolute Maximum Ratings($T_a=25^\circ\text{C}$)

Parameter	Symbol	Rating	Unit
Collector to Base Voltage	V_{CBO}	-60	V
Collector to Emitter Voltage	V_{CEO}	-60	V
Emitter to Base Voltage	V_{EBO}	-5.0	V
Collector Current - Continuous	I_C	-4.0	A
Peak Collector Current	I_{CM}	-7.0	A
Base Current - Continuous	I_B	-1.0	A
Collector Power Dissipation	$P_C(T_C=25^\circ\text{C})$	40	W
Junction Temperature	T_j	150	
Storage Temperature Range	T_{stg}	-55 ~ 150	

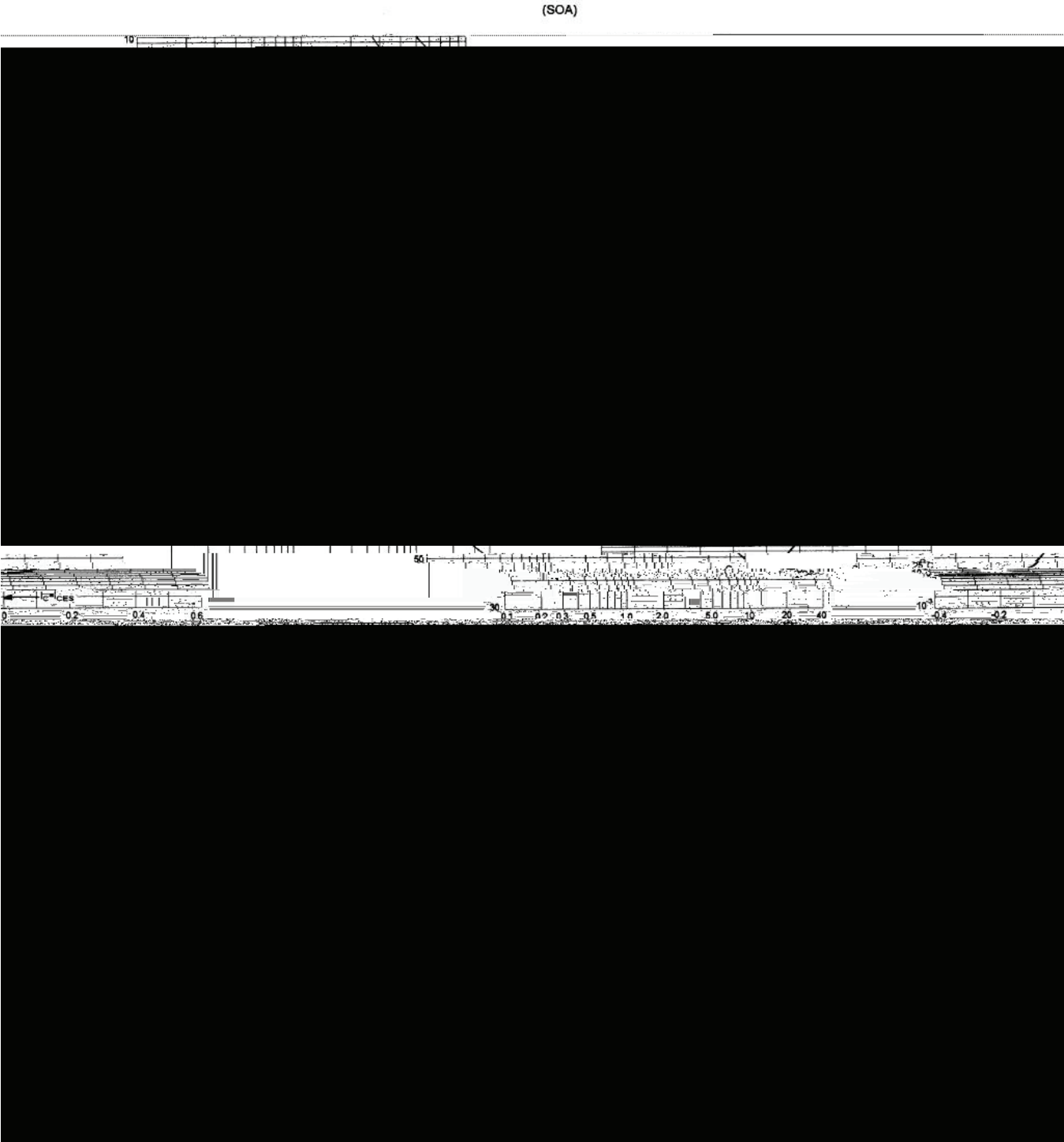
电 气 特 性 / Electrical Characteristics($T_a=25^\circ\text{C}$)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector to Base Breakdown Voltage*	$*V_{CEO}$	$I_C=-100\text{mA}$ $I_B=0$	-60			V
Collector to Emitter Breakdown Voltage	V_{CBO}	$I_C=-1\text{mA}$ $I_E=0$	-60			V
Emitter to Base Breakdown Voltage	V_{EBO}	$I_E=-1\text{mA}$ $I_C=0$	-5.0			V
Collector Cut-Off Current	I_{CBO}	$V_{CB}=-60\text{V}$ $I_E=0$			-0.1	mA
Collector Cut-Off Current	I_{CEO}	$V_{CE}=-60\text{V}$ $I_B=0$			-1.0	mA
Emitter Cut-Off Current	I_{EBO}	$V_{EB}=-5.0\text{V}$ $I_C=0$			-1.0	mA
DC Current Gain	$*h_{FE(1)}$	$V_{CE}=-2.0\text{V}$ $I_C=-1.5\text{A}$	25		100	
	$*h_{FE(2)}$	$V_{CE}=-2.0\text{V}$ $I_C=-4.0\text{A}$	10			
Collector to Emitter Saturation Voltage*	$*V_{CE(sat)}$	$I_C=-1.5\text{A}$ $I_B=0.15\text{A}$			-0.6	V
Collector to Emitter Saturation Voltage*	$*V_{CE(sat)}$	$I_C=-4.0\text{A}$ $I_B=-1.0\text{A}$			-1.4	V
Base to Emitter On Voltage*	$*V_{BE(on)}$	$I_C=-1.5\text{A}$ $V_{CE}=-2.0\text{V}$			-1.2	V
Transition Frequency	f_T	$I_C=-1.0\text{A}$ $V_{CE}=-4.0\text{V}$ $f=1.0\text{MHz}$	2.5			MHz

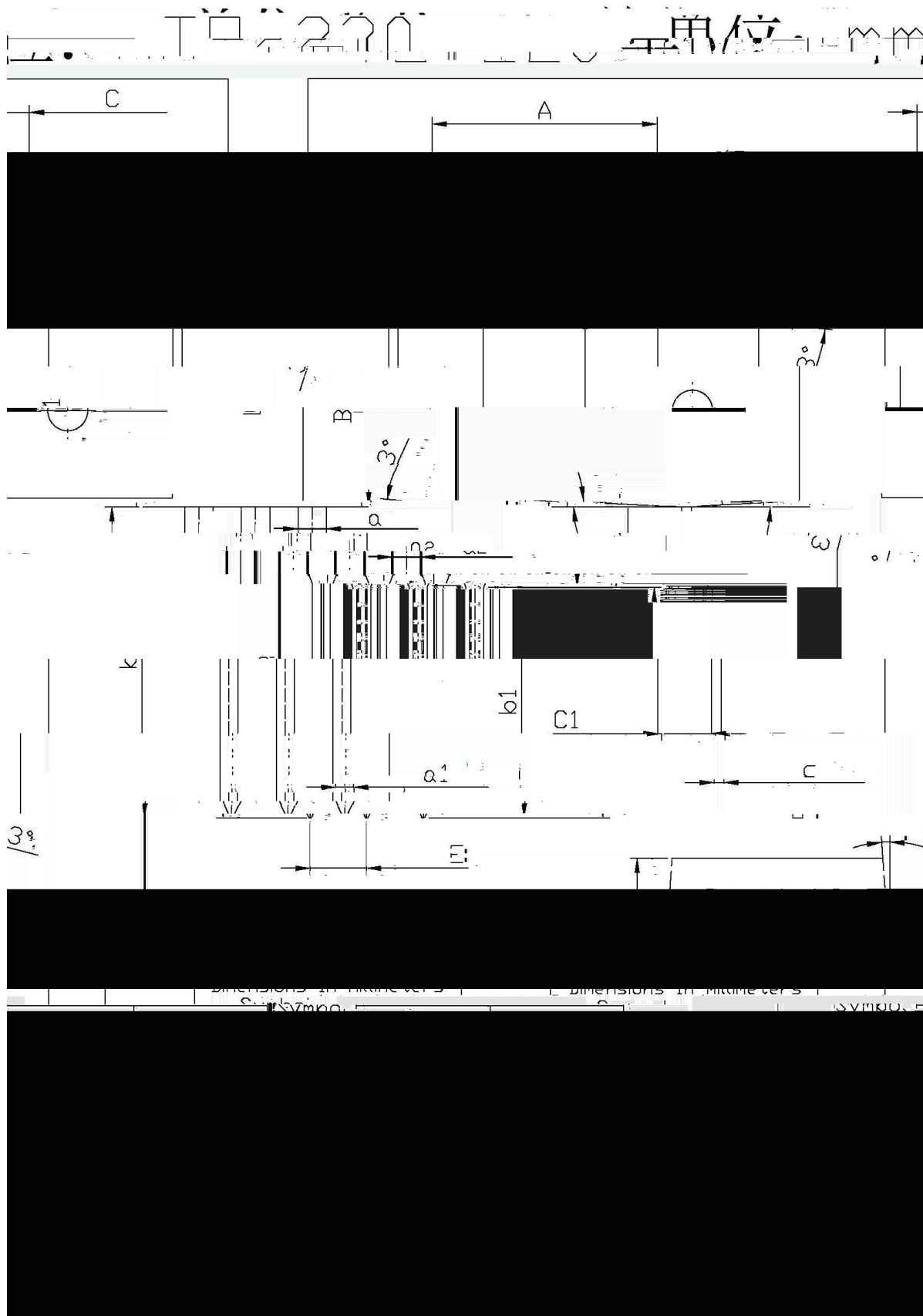
*Pulse test: pulse width 300 μs ; duty cycle 2%.

* $\leq 300\mu\text{s}$ $\leq 2\%$

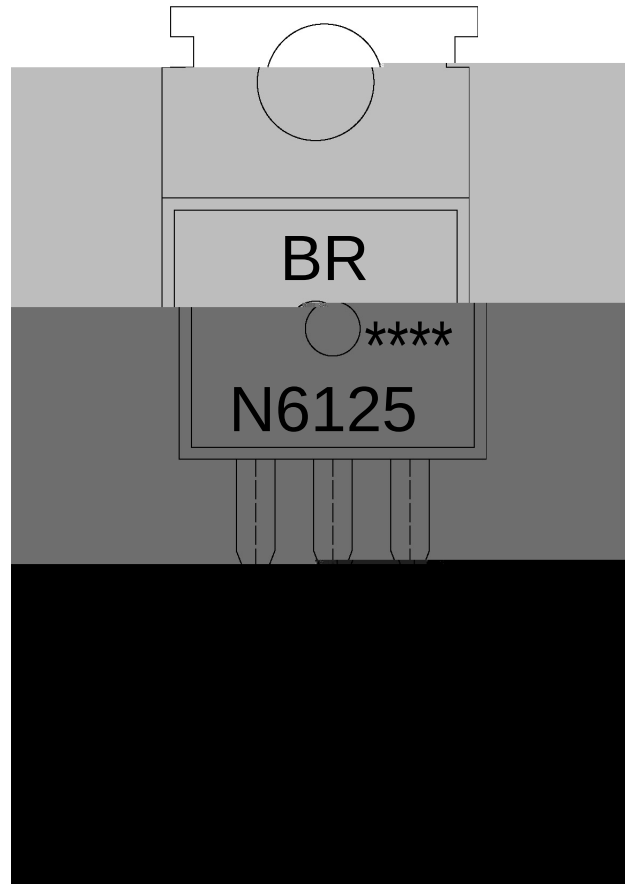
电 压 电 流 特 性 曲 线 / Electrical Characteristic Curve



⊂ É Ò Ì f / Package Dimensions



1. 1"Q / Marking Instructions



BR

N6125

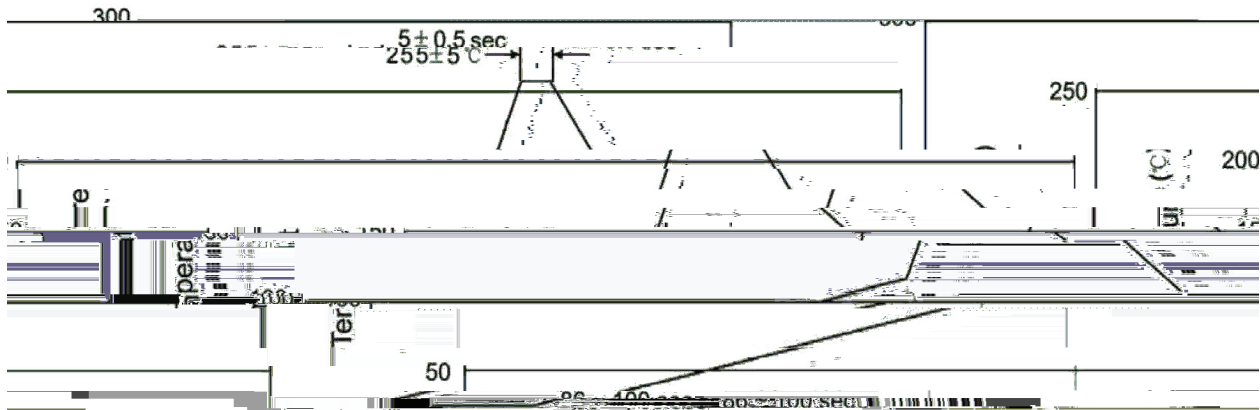
Note:

BR: Company Code

N6125: Product Type.

****: Lot No. Code, code change with Lot No.

↓ § ¶ ŵ'E ¶ f (ŵ'ŝ) / Temperature Profile for Dip Soldering(Pb-Free)



Note:

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|---|-------|-----|-----------|--------|---|
| 1 | 25 | 150 | 60 | 90sec; | 1.Preheating:25~150 , Time:60~90sec. |
| 2 | 255±5 | | 5±0.5sec; | | 2.Peak Temp.:255±5 , Duration:5±0.5sec. |
| 3 | | 2 | 10 | /sec. | 3. Cooling Speed: 2~10 /sec. |

↓ ŵ q ſ'Y ¶ / Resistance to Soldering Heat Test Conditions

270±5 10±1 sec. Temp.:270±5 Time:10±1 sec

¶ ſ ſ— / Packaging SPEC.

/ BULK

Package Type	Units					Dimension (unit mm ³)		
	Units/Bag /	Bags/Inner Box /	Units/Inner Box /	Inner Boxes/Outer Box /	Units/Outer Box /	Bag	Inner Box	Outer Box
TO-220/F	200	10	2,000	5	10,000	135×190	237×172×102	560×245×195

/ TUBE

Package Type	Units					Dimension (unit mm ³)		
	Units/Tube /	Tubes/Inner Box /	Units/Inner Box /	Inner Boxes/Outer Box /	Units/Outer Box /	Tube	Inner Box	Outer Box
TO-220/F	50	20	1,000	5	5,000	532×31.4×5.5	555×164×50	575×290×180

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