

TO-220F

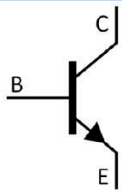
NPN

Silicon NPN transistor in a TO-220F Plastic Package.

High voltage.

DC-DC

Switching regulator applications, High voltage switching applications, High speed DC-DC converter applications.



PIN1 Base

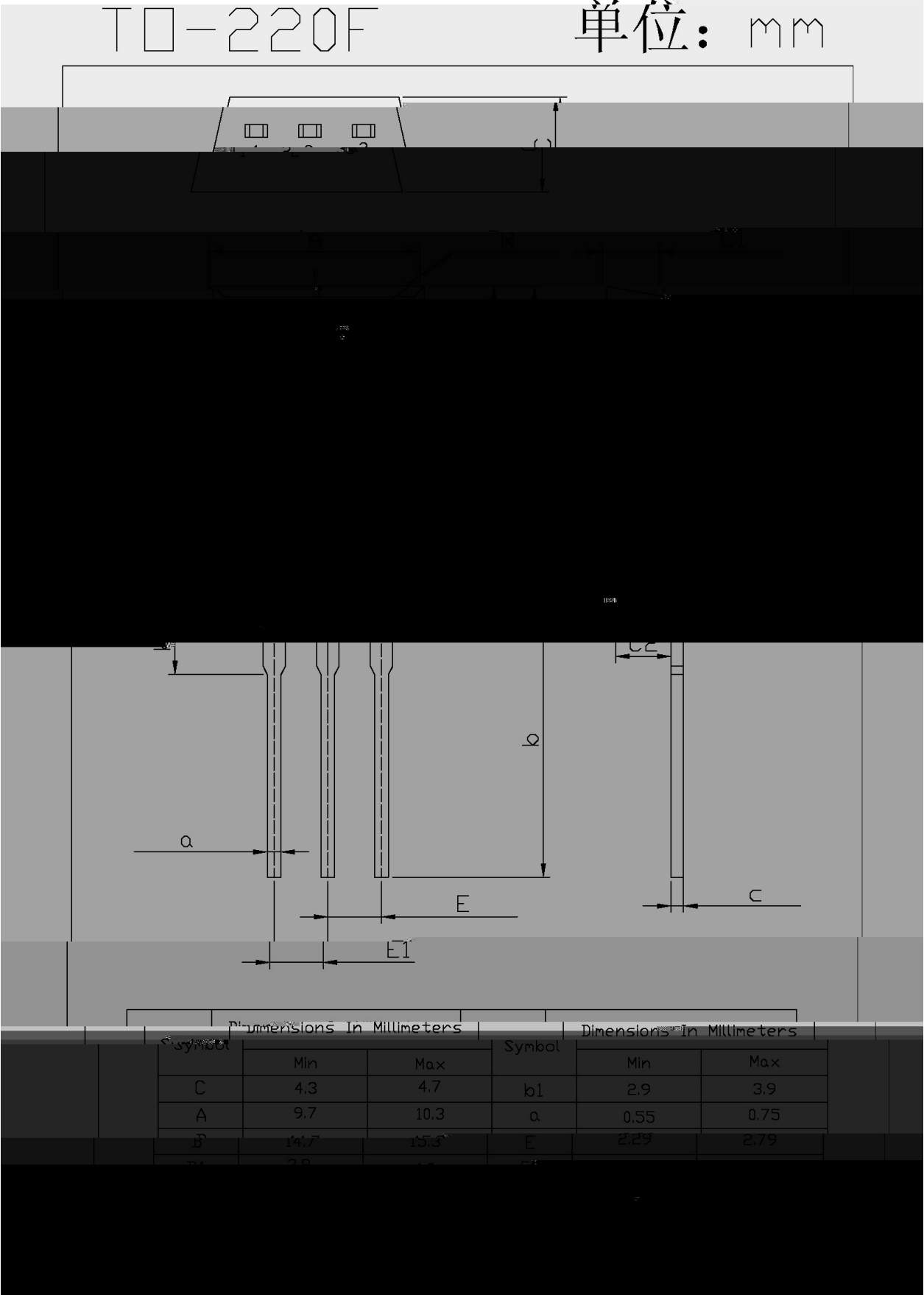
PIN 2 Collector

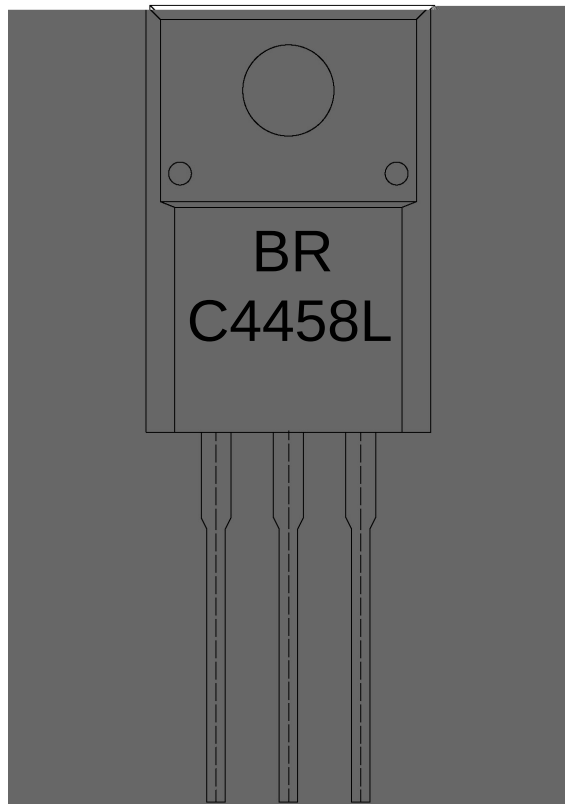
PIN 3 Emitter

See Marking Instructions.

Parameter	Symbol	Rating	Unit
Collector to Base Voltage	V_{CBO}	900	V
Collector to Emitter Voltage	V_{CEO}	500	V
Emitter to Base Voltage	V_{EBO}	9.0	V
Collector Current - Continuous	I_C	8.0	A
Base Current - Continuous	I_B	4.0	A
Emitter Current - Continuous	I_E	12	A
Collector Power Dissipation	$P_C(T_C=25^{\circ}C)$	40	W
Junction Temperature	T_j	150	$^{\circ}C$
Storage Temperature Range	T_{stg}	-55~150	$^{\circ}C$

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector to Base Breakdown Voltage	V_{CBO}	$I_C=1mA$ $I_B=0$	900			V
Collector to Emitter Breakdown Voltage	V_{CEO}	$I_C=10mA$ $I_B=0$	500			V
Collector Cut-Off Current	I_{CEO}	$V_{CE}=400V$ $I_E=0$			250	μA
Emitter Cut-Off Current	I_{EBO}	$V_{EB}=7V$ $I_C=0$			100	μA
Collector Cut-Off Current	I_{CBO}	$V_{CB}=700V$ $I_C=0$			100	μA
DC Current Gain	$h_{FE(1)}$	$V_{CE}=5.0V$ $I_C=2.0A$	25		40	
	$h_{FE(2)}$	$V_{CE}=5.0V$ $I_C=5.0A$	8.0			
Collector to Emitter Saturation Voltage	$V_{CE(sat)(1)}$	$I_C=2.0A$ $I_B=0.4A$			0.3	V
	$V_{CE(sat)(2)}$	$I_C=5.0A$ $I_B=1.0A$			0.6	V
	$V_{CE(sat)(3)}$	$I_C=8.0A$ $I_B=2.0A$			1.2	V
Base to Emitter Saturation Voltage	$V_{BE(sat)(1)}$	$I_C=2.0A$ $I_B=0.4A$			1.1	V
	$V_{BE(sat)(2)}$	$I_C=5.0A$ $I_B=1.0A$			1.2	V
Transition Frequency	f_T	$V_{CE}=10V$ $I_C=0.5A$	4.0			MHz
Storage Time	t_S	$V_{CC}=125V$ $I_C=5A$			3.5	μs
Fall Time	t_F	$I_{B1}=-I_{B2}=1A$ $R_L=50\Omega$			0.7	μs





BR

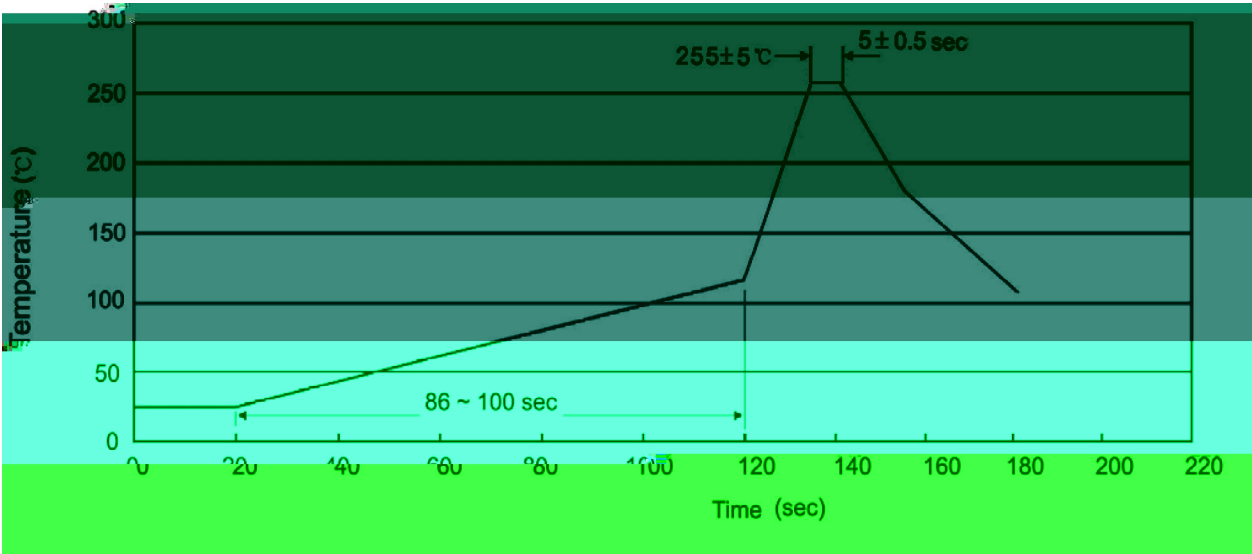
C4458L

Note:

BR: Company Code.

C4458L: Product Type.

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



Note:

- 1

25 150

60 90sec;
- 2

255±5

5±0.5sec;
- 3

2 10 /sec.
- 1.Preheating:25~150 , Time:60~90sec.

2.Peak Temp.:255±5 , Duration:5±0.5sec.

3. Cooling Speed: 2~10 /sec.

270±5

10±1 sec.

Temp.:270±5℃

Time:10±1 sec

/ BULK

Package Type	Units					Dimension (unit mm ³)		

/ TUBE

Package Type	Units					Dimension (unit mm ³)		