

/ Descriptions

WR0553I M M E QSQ æ M y s ll 1 Silicon NPN transistor in a TO-220F Plastic Package.

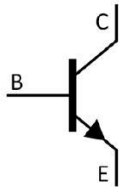
/ Features

Low $V_{CE(sat)}$, excellent DC current gain characteristics, $P_C=30W$, wide SOA.

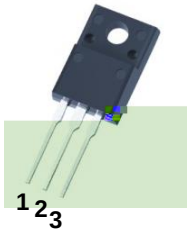
/ Applications

General Purpose Power Amplifier.

/ Equivalent Circuit



/ Pinning



PIN1 χ Base PIN 2 χ Collector PIN 3 χ Emitter

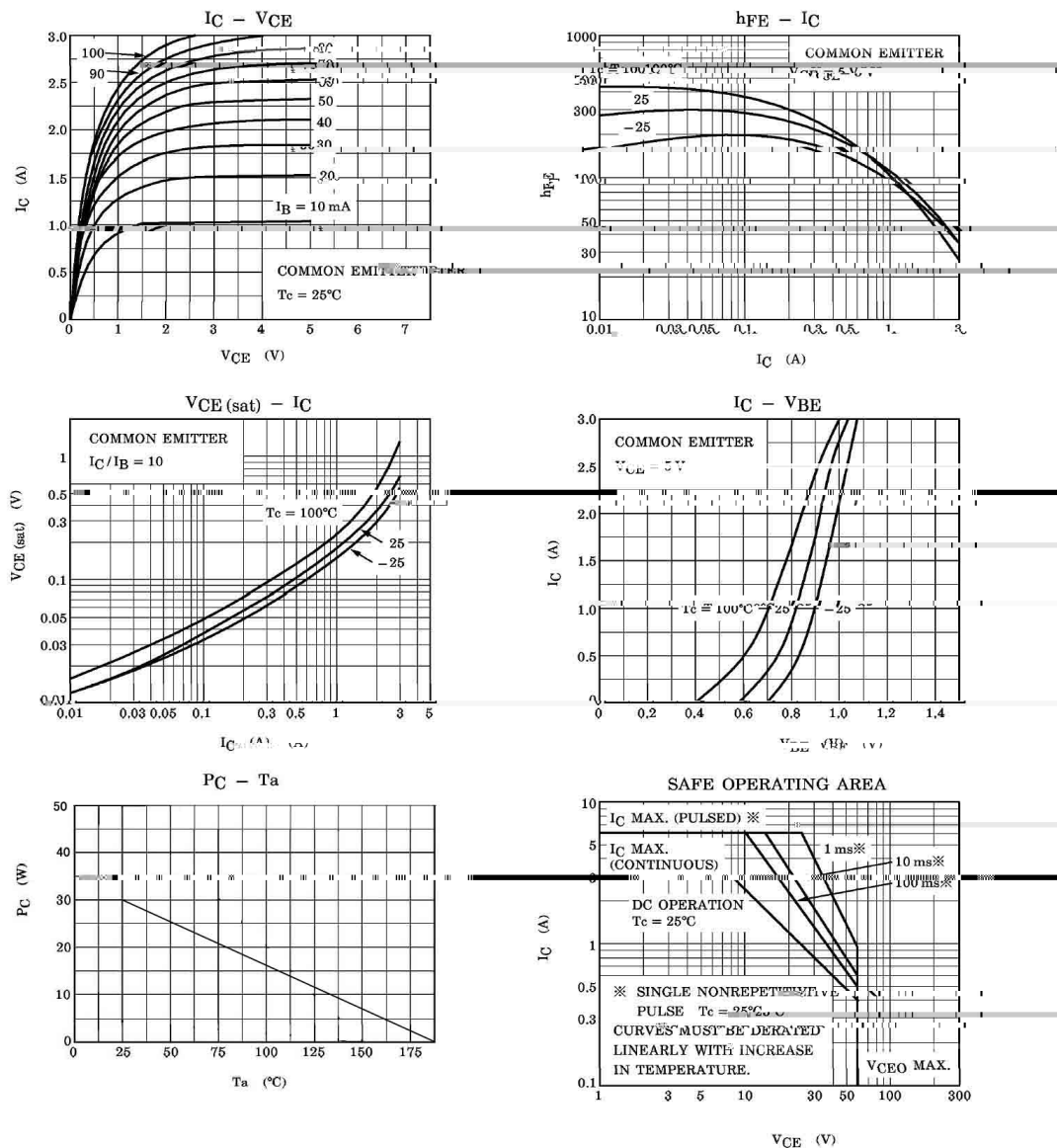
/ h_{FE} Classifications & Marking

h _{FE} Classifications Symbol	E	F
h _{FE} Range	100 200	160 320

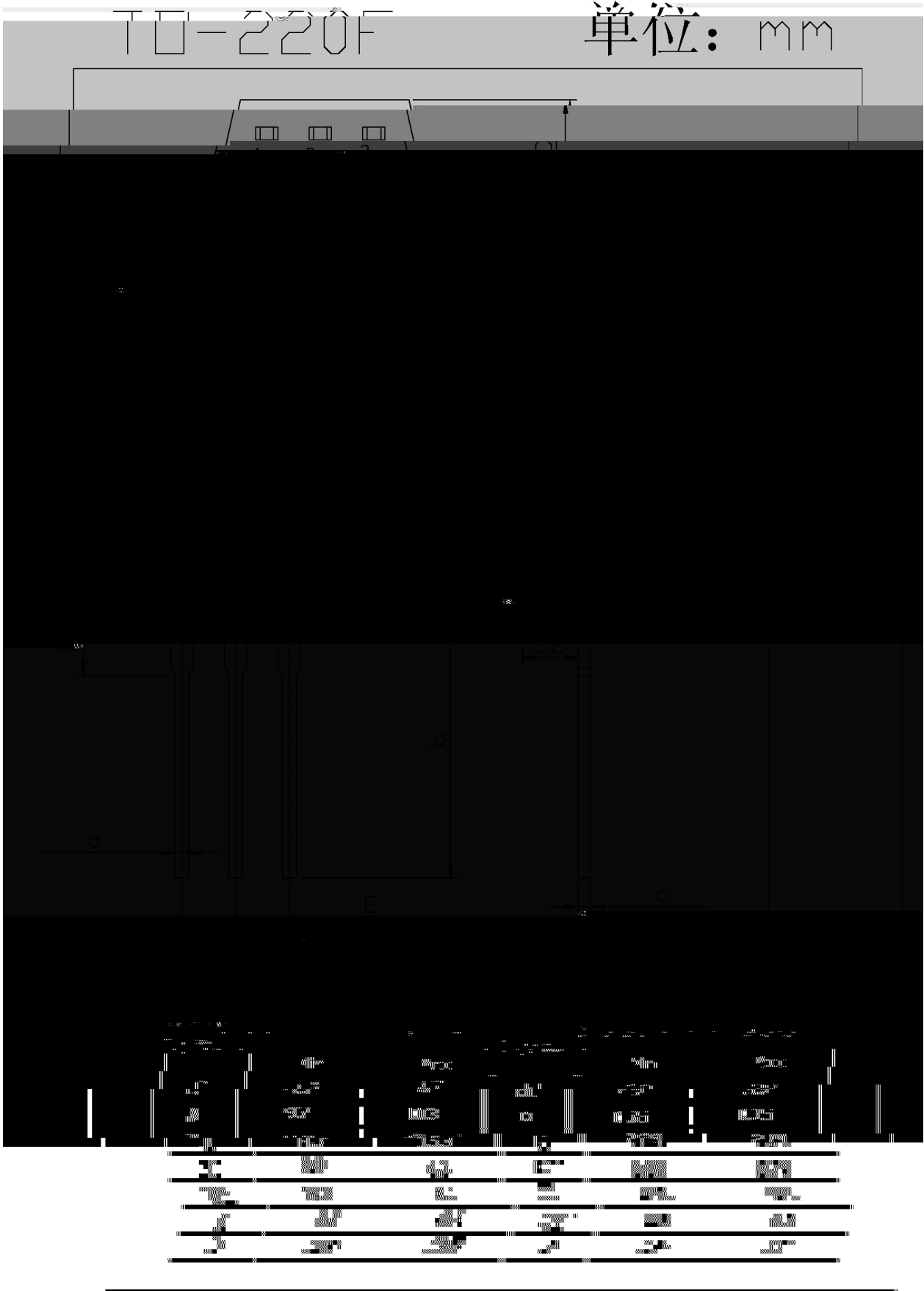
Parameter	Symbol	Rating	Unit
Collector to Base Voltage	V_{CBO}	80	V
Collector to Emitter Voltage	V_{CEO}	60	V
Emitter to Base Voltage	V_{EBO}	5.0	V
Collector Current - Continuous	I_C	3.0	A
Peak Collector Current	I_{CM}	6.0	A
Collector Power Dissipation	P_C	2.0	W
Collector Power Dissipation	$P_C(T_c=25^\circ C)$	30	W
Junction Temperature	T_j	150	
Storage Temperature Range	T_{stg}	-55 ~ 150	

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector to Base Breakdown Voltage	V_{CBO}	$I_C=50\text{ }\mu A$	80			V
Collector to Emitter Breakdown Voltage	V_{CEO}	$I_C=1.0mA$	60			V
Emitter to Base Breakdown Voltage	V_{EBO}	$I_E=50\text{ }\mu A$	5.0			V
Collector Cut-Off Current	I_{CBO}	$V_{CB}=60V$ $I_E=0$			10	nA
Emitter Cut-Off Current	I_{EBO}	$V_{EB}=4.0V$ $I_C=0$			10	nA
DC Current Gain	h_{FE}	$V_{CE}=5.0V$ $I_C=500mA$	100		320	

/ Electrical Characteristic Curve



/ Package Dimensions

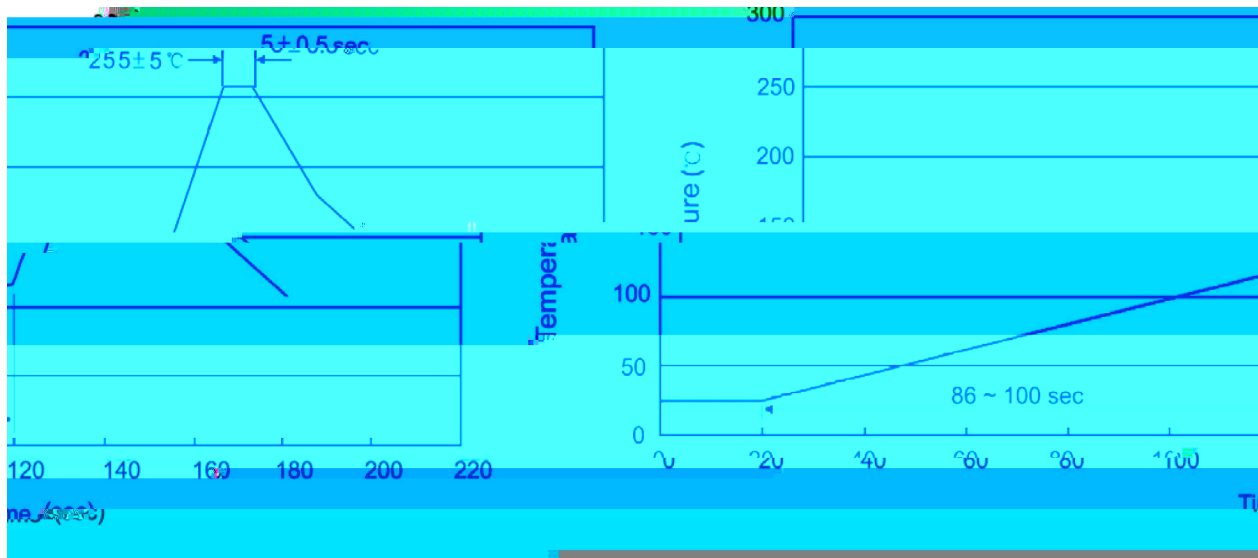


2SD2061

Rev.E Mar.-2016

DATA SHEET

() / Temperature Profile for Dip Soldering(Pb-Free)



б " X

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

Note:

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

/ Resistance to Soldering Heat Test Conditions

□ °C 270±5 °C 10±1 sec. Temp.: 270±5 Time: 10±1 sec

/ Packaging SPEC.

°C 10±1 sec / BULK

Package Type	Units					Dimension		(unit mm ³)