/ Descriptions

TO-126F NPN Silicon NPN transistor in a TO-126F Plastic Package.

/ Features

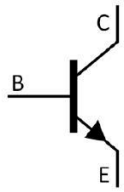
BD439

Complementary pair with BD439.

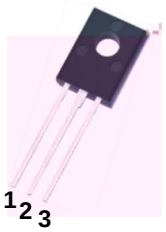
/ Applications

Medium power linear and switching applications.

/ Equivalent Circuit



/ Pinning



PIN1 Emitter PIN 2 Collector PIN 3 Base

/ h_{FE} Classifications & Marking

See Marking Instructions.

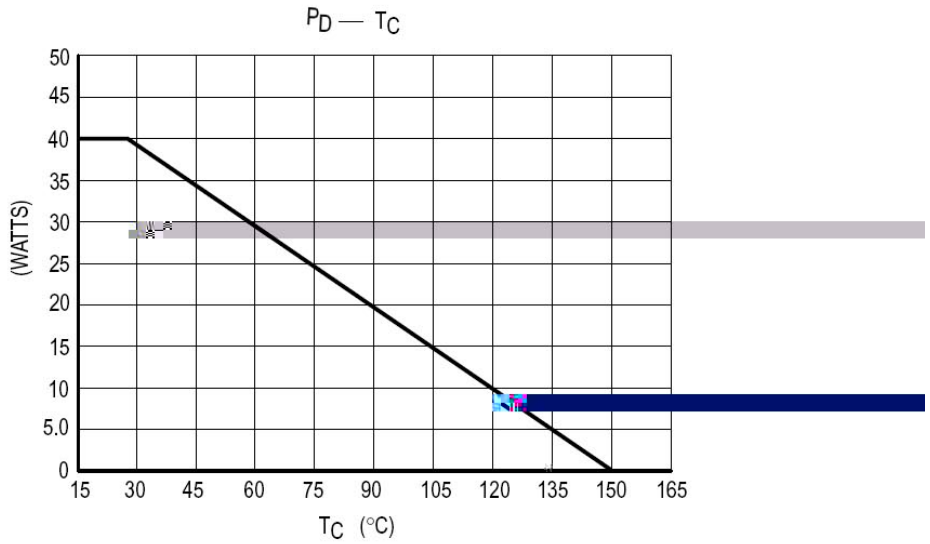
/ Absolute Maximum Ratings(Ta=25)

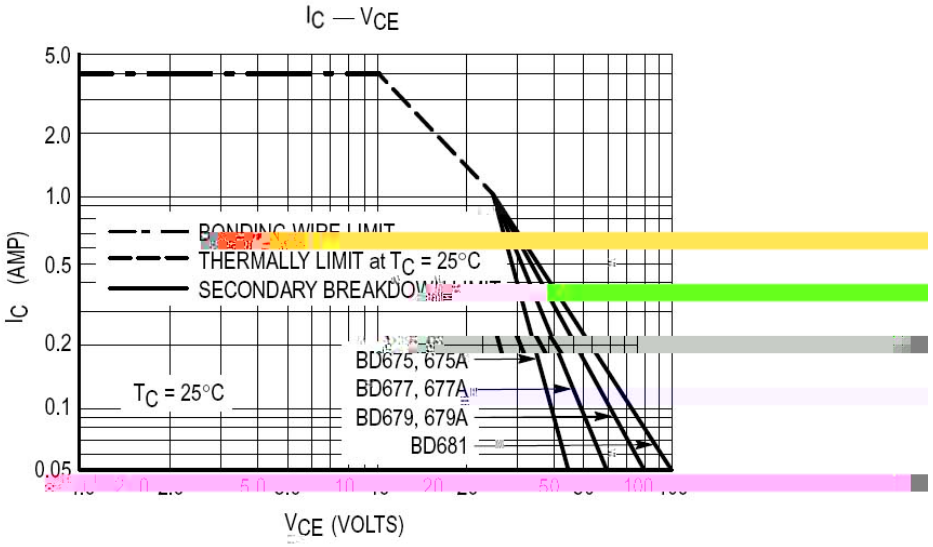
Parameter	Symbol	Rating	Unit
Collector to Base Voltage	V_{CBO}	45	V
Collector to Emitter Voltage	V_{CEO}	45	V
Emitter to Base Voltage	V_{EBO}	5.0	V
Collector Current - Continuous	I_C	4.0	A
Base Current - Continuous	I_B	0.1	A
Collector Power Dissipation	P_C	40	W
Junction Temperature	T_j	150	
Storage Temperature Range	T_{stg}	-55 150	

/ Electrical Characteristics(Ta=25)

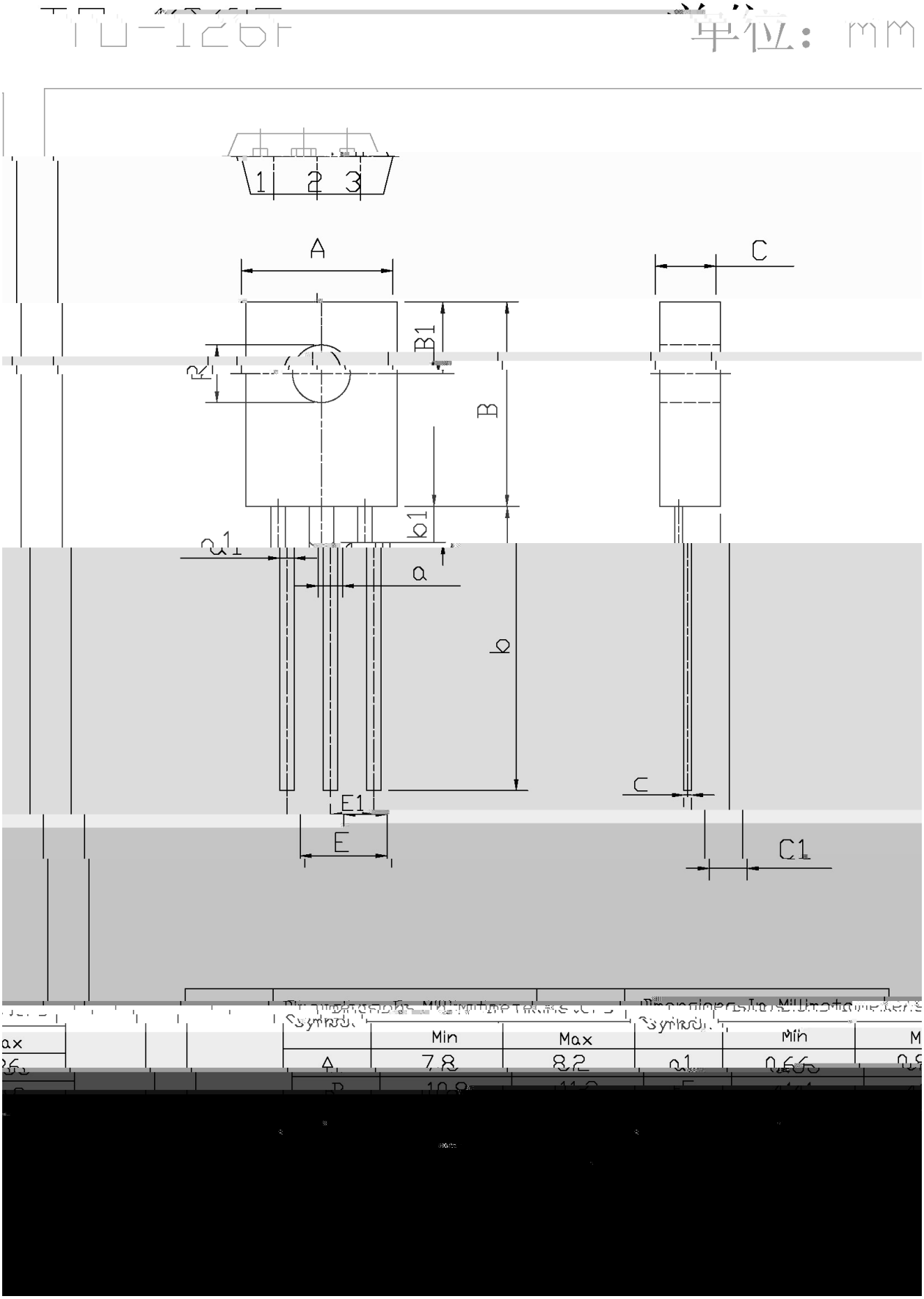
Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector to Emitter Breakdown Voltage	V_{CEO}	I_C=50mA I_B=0	45			V
Collector Cut-Off Current	I_{CBO}	V_{CB}=Rated BV_{CEO} I_E=0			0.2	mA
Collector Cut-Off Current	I_{CEO}	V_{CE}=Half Rated V_{CEO} I_B=0			500	μA
Emitter Cut-Off Current	I_{EBO}	V_{BE}=5.0V I_C=0			2.0	mA
DC Current Gain	h_{FE}	V_{CE}=3.0V I_C=1.5A	750			
Collector to Emitter Saturation Voltage	$V_{CE(sat)}$	I_C=2.0A I_B=40mA			2.8	V
Base to Emitter On Voltage	$V_{BE(on)}$	I_C=2.0A V_{CE}=3.0V			2.5	V

/ Electrical Characteristic Curve

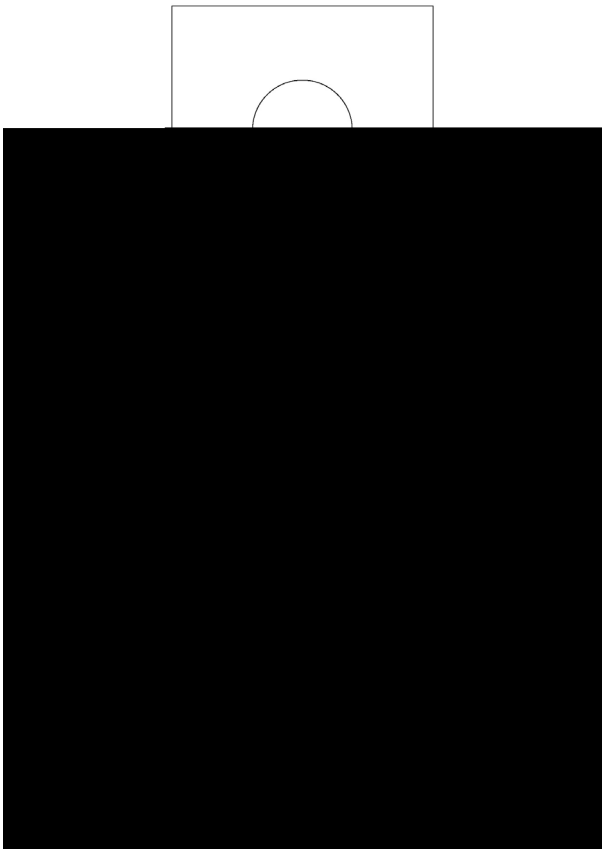




/ Package Dimensions



/ Marking Instructions



BR

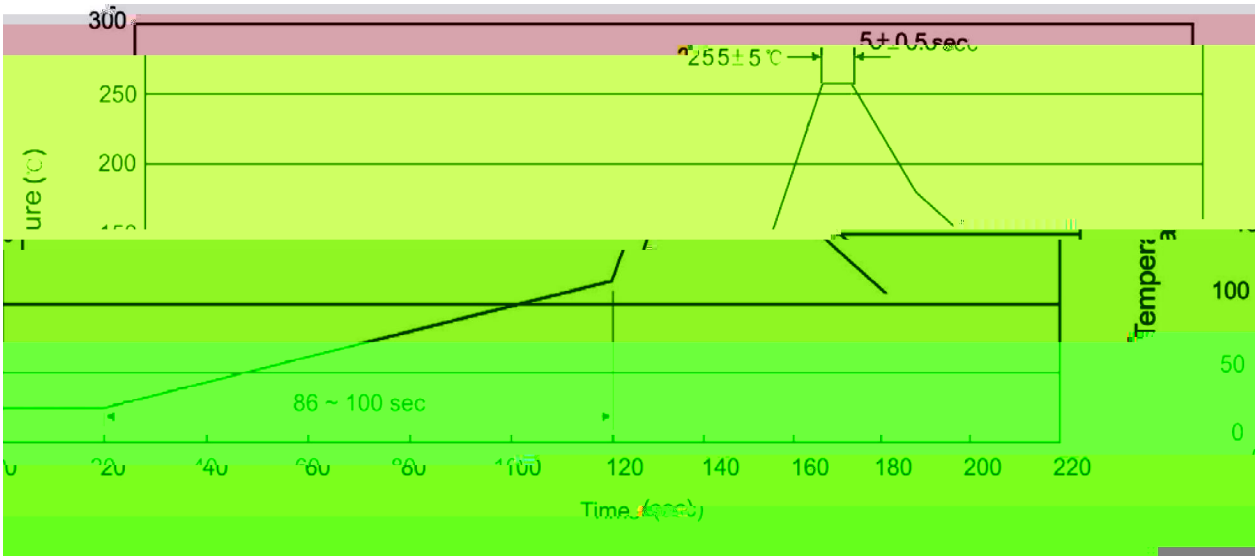
BD675

****

Note:

BR:	Company Code
BD675:	Product Type.
****:	Lot No. Code, code change with Lot No.

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



					Note:
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.

/ Resistance to Soldering Heat Test Conditions

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

/ Packaging SPEC.

/ BULK

Package Type	Units					Dimension		(unit mm³)
	Units/Tube /	Tubes/Inner Box /	Units/Inner Box /	Inner Boxes/Outer Box /	Units/Outer Box /	Tube	Inner Box	Outer Box
TO-126/F	500	6	3,000	5	15,000	135×190	237×172×102	560×245×195

/ TUBE

Package Type	Units					Dimension		(unit mm³)
	Units/Tube /	Tubes/Inner Box /	Units/Inner Box /	Inner Boxes/Outer Box /	Units/Outer Box /	Tube	Inner Box	Outer Box
TO-126/F	65	26	1,690	5	8,450	532×31×5.6	555×164×50	575×290×180

/ Notices