

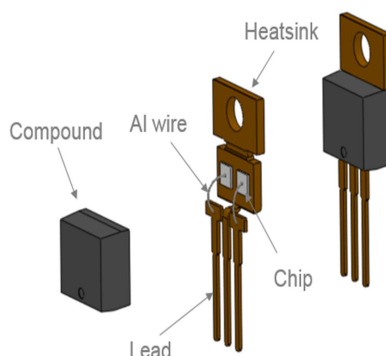
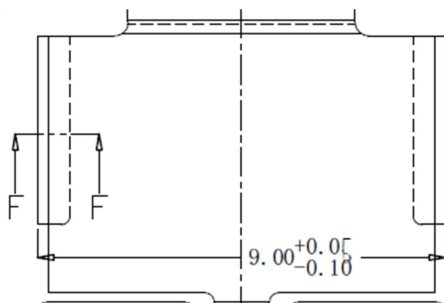
TO-220AB

TO-220AC

## 1: Certification

- System:
  - IATF 16949
  - ISO9001
  - ISO14001
  - ISO45001
- ROHS/REACH/ELV:
  - Lead frame、Wire, Molding compound、Post plating.
- UL 94: V-0
- Whisker Test: JESD 201 class 1A
- AEC-Q101 (Rev E): Qualified Available
- Solder bath temperature : 275°C maximum, 10 s

## 2: Internal Structure Diagram



Meet Die Size

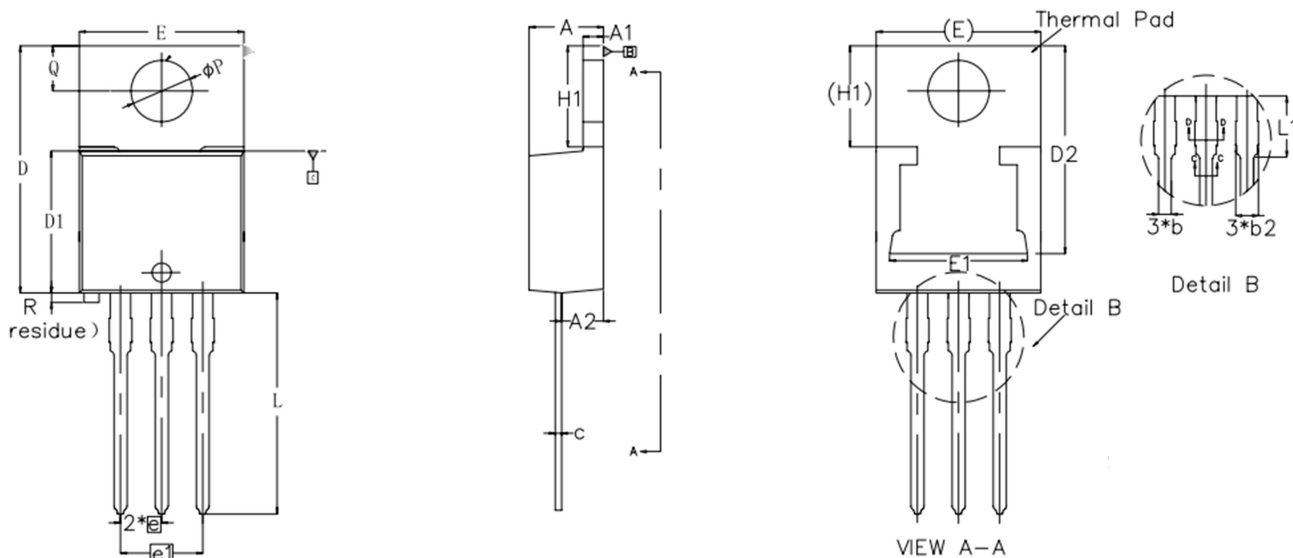
Die Pad(mm)	Die size(mm)	
X=8.50, Y=5.65	Double die (Max)	Single die(Max)
	X=3.50, Y=5.30	X=7.50, Y=5.30

## 3: Reliability Experiment

	Test	Test Condition
1	Temperature Cycle (TMCL)	500 cycles at -55°C to 150°C
2	Unbiased Highly Accelerated Stress Test (UHST)	96 hours at Ta = 130°C, RH = 85% ;P=2.27atm.
3	High Temperature, Humidity & Reverse Bias (THBS)	1000 hours at Tj = 85°C, RH = 85%, Reverse Bias = 80% rated voltage
4	Thermal Fatigue (TFAT)	10000 cycles, Tj = 25°C to 125°C, DTj ≥ 80°C, Id=depends on device & Ton = Toff ~2.5 to 3.5 mins.
5	Static High Temperature Life (SHTL)	1000 hours – Tj = max operating temp, Reverse Bias = 80% / 100% rated voltage.(according to customer request).
6	High Temperature Storage (HTSL)	1000 hours at Ta = 150°C or Ta=175°C

## 4: Package Outline Dimensions in millimeters

### 4.1 POD



SYMBOL	MILLIMETERS			NOTES		SYMBOL	MILLIMETERS			NOTES
	Normal	MIN.	MAX.				Normal	MIN.	MAX.	
A	4.55	4.44	4.65			E1	8.57	8.25	8.89	
A1	1.27	1.14	1.39			e	2.54	2.45	2.65	
A2	2.60	2.54	2.79			e1	5.08	4.95	5.20	
b	0.85	0.7	0.9			H1	6.20	6.09	6.40	
b1	0.83	0.38	0.97			L	13.60	13.52	14.00	
b2	1.33	1.20	1.45			L1	3.60	3.56	3.80	
b3	1.33	1.20	1.45			$\phi P$	3.80	3.70	3.91	
c	0.50	0.36	0.56			Q	2.80	2.62	2.87	
c1	0.48	0.36	0.56			R			0.2	
D	15.25	14.95	15.32							
D1	8.75	8.50	8.89							
D2	12.85	12.20	13.30							
E	10.18	10.11	10.40							