

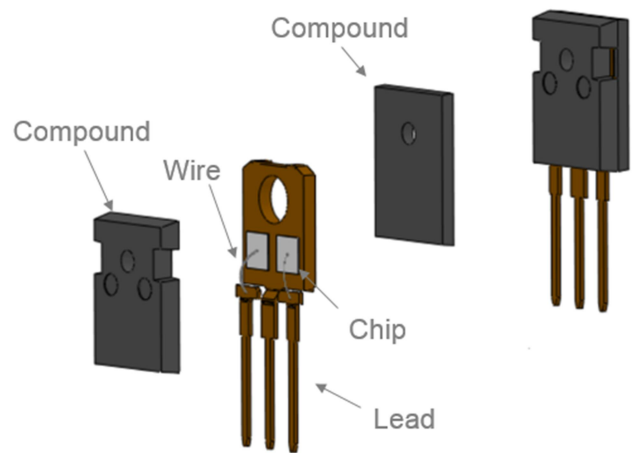
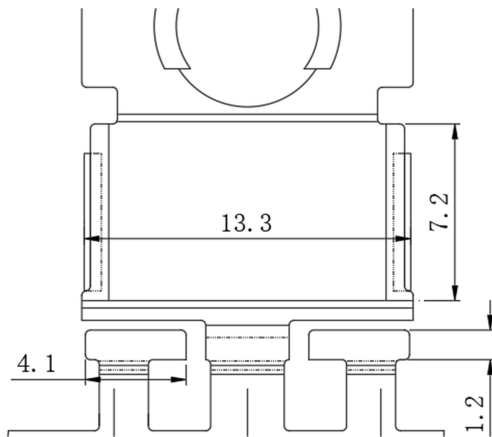
TO-247AB

TO-247AC

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

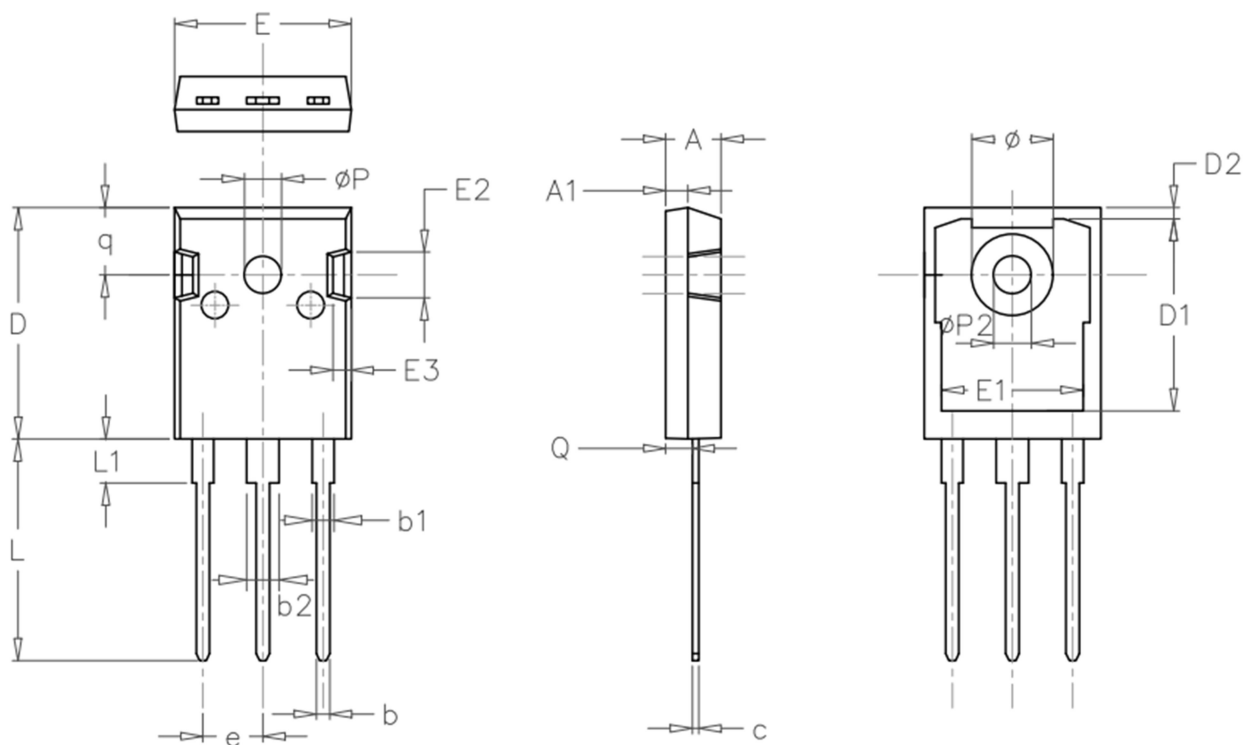
Die Pad(mm)	Die size(mm)	
X=12.50, Y=7.62	Double die (Max)	Single die(Max)
	X=5.50, Y=7.25	X=11.50, Y=7.25

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

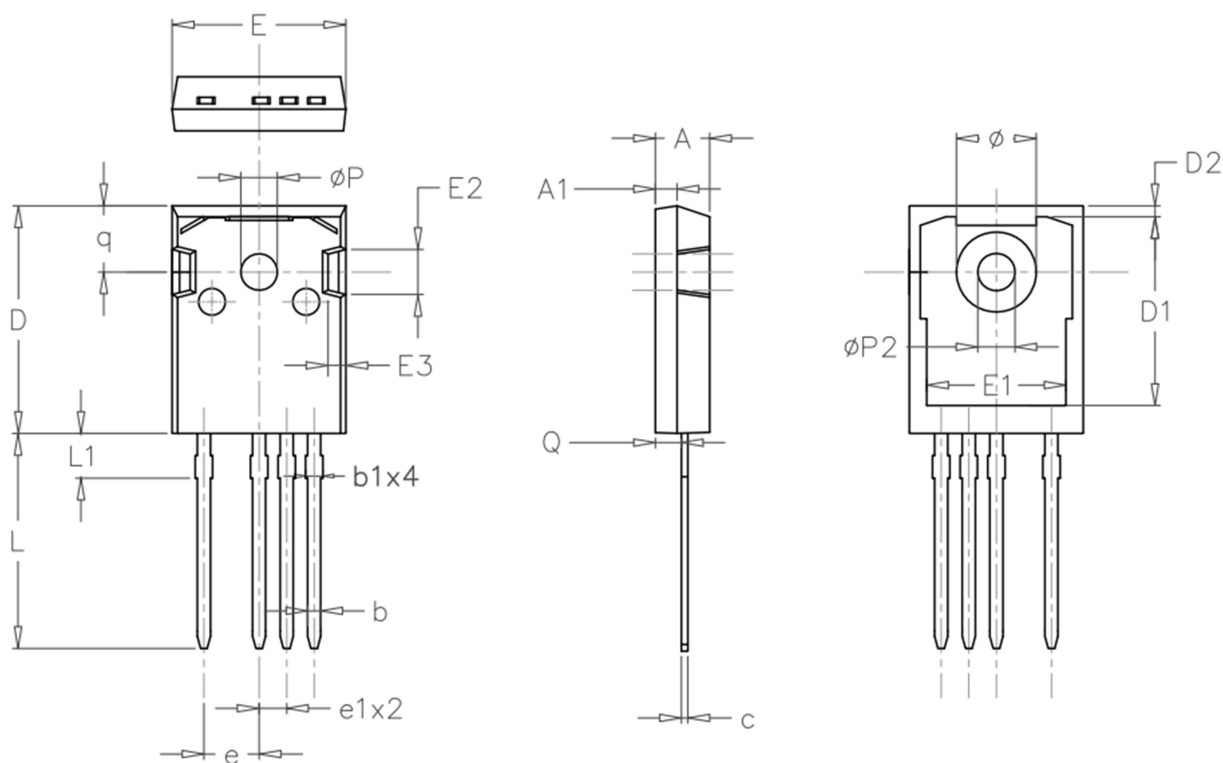
4: Package Outline Dimensions in millimeters

4.1 POD



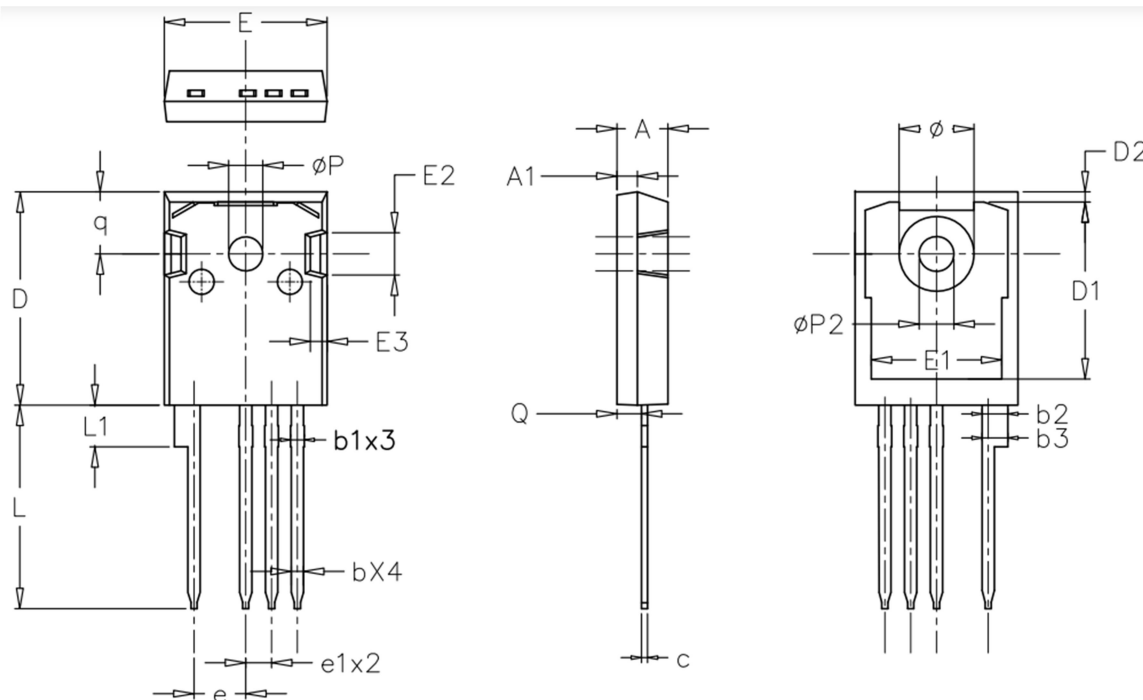
SYMBOL	MILLIMETERS			NOTES	SYMBOL	MILLIMETERS			NOTES
	Normal	MIN.	MAX.			Normal	MIN.	MAX.	
A	4.98	4.68	5.36		ϕP	3.66	3.45	3.85	
A1	1.99	1.90	2.10		e	5.44	BSC		
Q	2.41	2.30	2.60		q	6.24	5.99	6.58	
c	0.60	0.48	0.72		$\phi P2$	3.45	3.24	3.64	
b	1.20	1.00	1.40		ϕ	7.14	7.10	7.30	
b1	2.07	1.90	2.30		D1	16.56	16.10	17.10	
b2	3.07	2.90	3.30		D2	0.98	0.80	1.36	
D	21.10	20.80	21.80		E1	13.30	13.00	13.52	
E	15.98	15.38	16.20		E2	5.64	5.10	6.10	
L	20.28	19.50	20.50		E3	2.33	1.90	2.70	
L1	4.01	3.75	4.35						

Option A



SYMBOL	MILLIMETERS			NOTES	SYMBOL	MILLIMETERS		
	Normal	MIN.	MAX.			Normal	MIN.	MAX.
A	4.98	4.68	5.36		e	5.08	BSC	
A1	1.99	1.90	2.10		e1	2.54	BSC	
Q	2.41	2.30	2.60		q	6.24	5.99	6.58
c	0.60	0.48	0.72		øP2	3.45	3.24	3.64
b	1.20	1.00	1.40		ø	7.14	7.10	7.30
b1	1.75	1.65	1.80		D1	16.56	16.10	17.10
D	21.10	20.80	21.80		D2	0.98	0.80	1.36
E	15.98	15.38	16.20		E1	13.30	13.00	13.52
L	19.95	19.81	20.10		E2	5.64	5.10	6.10
L1	4.09	4.0	4.17		E3	2.33	1.90	2.70
øP	3.66	3.45	3.85					

Option B



SYMBOL	MILLIMETERS			NOTES	SYMBOL	MILLIMETERS		
	Normal	MIN.	MAX.			Normal	MIN.	MAX.
A	4.98	4.68	5.36		e	5.08	4.90	5.30
A1	1.99	1.90	2.10		e1	2.54	2.34	2.74
Q	2.40	2.20	2.60		q	6.24	5.99	6.58
c	0.60	0.45	0.75		øP	3.66	3.45	3.85
b	1.20	1.00	1.40		øP2	3.45	3.24	3.64
b1	1.35	1.10	1.60		ø	7.14	7.10	7.30
b2	2.53	2.40	2.70		D1	16.56	16.10	17.10
b3	2.53	2.40	2.70		D2	0.98	0.80	1.36
D	21.10	20.80	21.80		E1	13.30	13.00	13.52
E	15.98	15.38	16.20		E2	5.64	5.10	6.10
L	20.00	19.60	20.40		E3	2.33	1.90	2.70
L1	4.10	3.90	4.30					