

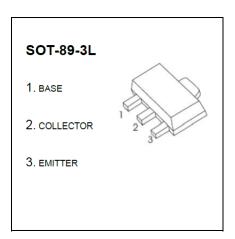
# JIANGSU CHANGJING ELECTRONICS TECHNOLOGY CO., LTD.

# **AD-KTA1668 series Plastic-Encapsulated Transistor**

AD-KTA1668 series Transistor (PNP)

#### **FEATURES**

- High collector-emitter voltage
- High transistor frequency
- AEC-Q101 qualified



# MAXIMUM RATINGS (T<sub>j</sub> = 25°C unless otherwise specified)

Parameter	Symbol	Value	Unit
Collector-base voltage	V <sub>CBO</sub>	-80	V
Collector-emitter voltage	V <sub>CEO</sub>	-60	V
Emitter-base voltage	V <sub>EBO</sub>	-5	V
Collector continuous current	Ic 1)	-1	Α
Collector power dissipation	Pc 1)	500	mW
Operating junction and storage temperature range	$T_{j}, T_{stg}$	-55 ~ 150	°C

# **ELECTRICAL CHARACTERISTICS (Tj = 25°C unless otherwise specified)**

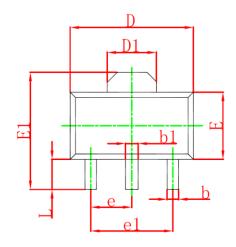
Parameter	Symbol	Test condition	Min	Тур	Max	Unit
Collector-base breakdown voltage	V <sub>(BR)CBO</sub>	$I_C = -0.1 \text{mA}, I_E = 0 \text{A}$	-80	-	-	V
Collector-emitter breakdown voltage	V <sub>(BR)CEO</sub>	$I_{C} = -1 \text{mA}, I_{B} = 0 \text{A}$	-60	-	ı	V
Emitter-base breakdown voltage	V <sub>(BR)EBO</sub>	$I_E = -0.1 \text{mA}, I_C = 0 \text{A}$	-5	-	-	V
Collector-base cut-off current	Ісво	V <sub>CB</sub> = -50V, I <sub>E</sub> = 0A	-	-	-100	nA
Emitter-base cut-off current	I <sub>EBO</sub>	V <sub>EB</sub> = -4V, I <sub>C</sub> = 0A	-	-	-100	nA
DC ourrent gain	h <sub>FE(1)</sub>	V <sub>CE</sub> = -2V, I <sub>C</sub> = -50mA	60	-	320	
DC current gain	h <sub>FE(2)</sub>	V <sub>CE</sub> = -2V, I <sub>C</sub> = -1A 3		-	-	-
Collector-emitter saturation voltage	V <sub>CE(sat)</sub>	I <sub>C</sub> = -500mA, I <sub>B</sub> = -50mA	ı	-	-0.7	V
Base-emitter saturation voltage	V <sub>BE(sat)</sub>	$I_C = -500 \text{mA}, I_B = -50 \text{mA}$	-	-	-1.2	V
Transition frequency	f⊤	V <sub>CE</sub> = -10V, I <sub>C</sub> = -50mA, f = 100MHz	ı	150	-	MHz
Collector output capacitance	Cob	V <sub>CB</sub> = -10V, I <sub>E</sub> = 0A, f = 1MHz	ı	12	-	pF

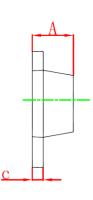
# **CLASSIFICATION OF h**<sub>FE(1)</sub>

RANK	AD-KTA1668-O	AD-KTA1668-Y	AD-KTA1668-GR
RANGE	60 ~ 120	100 ~ 200	160 ~ 320
MARKING	JO	ĴΥ	JGR

<sup>1)</sup> Maximum allowed temperature  $T_j$  = 25  $^{\circ} C.$ 

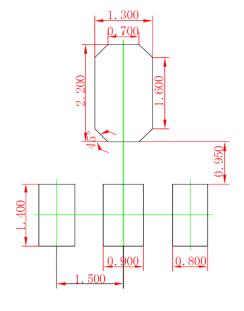
# **SOT-89-3L PACKAGE OUTLINE DIMENSIONS**





Symbol	Dimensions	In Millimeters	Dimensions In Inches		
Syllibol	Min	Max	Min	Max	
Α	1.400	1.600	0.055	0.063	
b	0.320	0.520	0.013	0.020	
b1	0.400	0.580	0.016	0.023	
С	0.350	0.440	0.014	0.017	
D	4.400	4.600	0.173	0.181	
D1	1.550	REF.	0.061 REF.		
Ш	2.300	2.600	0.091	0.102	
E1	3.940	4.250	0.155	0.167	
е	1.500	TYP.	0.060	TYP.	
e1	3.000	3.000 TYP.		TYP.	
L	0.900	1.200	0.035	0.047	

# **SOT-89-3L SUGGESTED PAD LAYOUT**

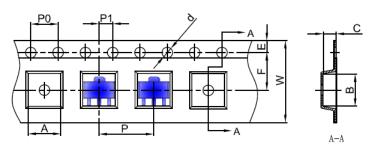


### Note:

- 1. Controlling dimension in millimeters.
- 2. General tolerance: ±0.05mm.
- 3. The pad layout is for reference purpose only.

## **SOT-89-3L TAPE AND REEL**

## SOT-89-3L Embossed Carrier Tape

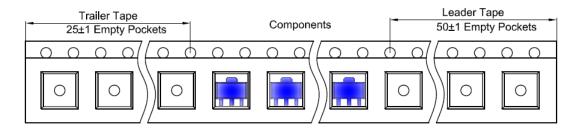


#### Packaging Description:

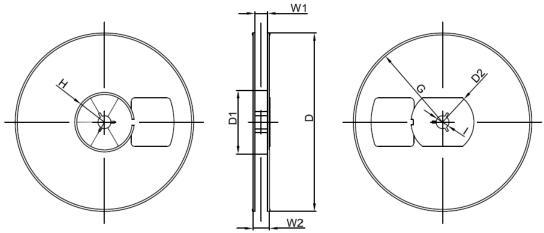
SOT-89-3L parts are shipped in tape. The carrier tape is made from a dissipative (carbon filled) polycarbonate resln. The cover tape is a multllayer film (Heat Activated Adhesive in nature) primarily composed of polyester film, adhesive layer, sealant, and anti-static sprayed agent. These reeled parts in standard option are shipped with 1,000 units per 7" or 18.0 cm diameter reel. The reels are clear in color and is made of polystyrene plastic (anti-static coated).

Dimensions are in millimeter										
Pkg type A B C d E F P0 P P1 W										
SOT-89-3L	4,85	4,45	1,85	Ø1,50	1,75	5,50	4.00	8,00	2.00	12,00

## SOT-89-3L Tape Leader and Trailer



### SOT-89-3L Reel



Dimensions are in millimeter									
Reel Option         D         D1         D2         G         H         I         W1         W2								W2	
7"Dia	Ø180.00	60.00	R32.00	R86.50	R30.00	Ø13.00	13.20	16.50	

REEL	Reel Size	Box	Box Size(mm)	Carton	Carton Size(mm)	G.W.(kg)
1000 pcs	7 inch	10,000 pcs	203×203×195	40,000 pcs	438×438×220	

#### **PUBLISHED BY**

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