

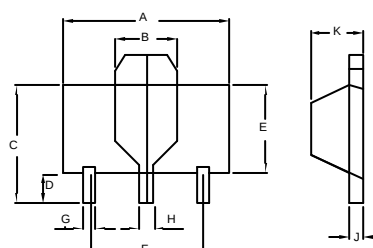


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2SA1736

PNP Silicon Power Transistors

SOT-89



DIMENSINS					
DIM	INCHES		MM		NOTES
	MIN	MAX	MIN	MAX	
A	.173	.181	4.39	4.60	
B	.063	.071	1.60	1.80	
C	.154	.165	3.91	4.19	
D	.031	.039	0.80	1.00	
E	.092	.100	2.34	2.54	
F	.118	----	3.00	----	TYP
G	.013	.019	0.33	0.48	
H	.015	.021	0.38	0.53	
J	.015	.016	0.38	0.41	
K	.055	.063	1.40	1.60	

Features

- Low saturation voltage: $V_{CE(sat)}=0.5V(\text{Max.})$ ($I_C=1.5A$)
- High speed switching: $t_{stg}=0.2\mu s(\text{Typ.})$
- Small flat package
- $P_C=1\sim 2W$ (Mounted on ceramic substrate)
- Complementary to 2SC4541
- Marking code: LD

Maximum Ratings

Symbol	Rating	Rating	Unit
V_{CEO}	Collector-Emitter Voltage	50	V
V_{CBO}	Collector-Base Voltage	60	V
V_{EBO}	Emitter-Base Voltage	6.0	V
I_C	Collector Current	3.0	A
I_B	Base Current	0.6	A
P_C	Collector power dissipation	500	mW
P_C^*	Collector power dissipation	1000	mW
T_J	Junction Temperature	-55 to +150	$^{\circ}C$
T_{STG}	Storage Temperature	-55 to +150	$^{\circ}C$

Electrical Characteristics @ 25 $^{\circ}C$ Unless Otherwise Specified

Symbol	Parameter	Min	Typ	Max	Units
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OFF CHARACTERISTICS

$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage ($I_C=10\text{mAdc}$, $I_E=0$)	50	---	---	Vdc
I_{CBO}	Collector-Base Cutoff Current ($V_{CB}=60\text{Vdc}$, $I_E=0$)	---	---	0.1	μAdc
I_{EBO}	Emitter-Base Cutoff Current ($V_{EB}=6.0\text{Vdc}$, $I_C=0$)	---	---	0.1	μAdc

ON CHARACTERISTICS

h_{FE-1}	DC Current Gain ($I_C=100\text{mAdc}$, $V_{CE}=2.0\text{Vdc}$)	120	---	400	---
h_{FE-2}	DC Current Gain ($I_C=2.0\text{Adc}$, $V_{CE}=2.0\text{Vdc}$)	40	---	---	---
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage ($I_C=1.5\text{Adc}$, $I_B=75\text{mAdc}$)	---	---	0.5	Vdc
$B_{CE(sat)}$	Base-Emitter Saturation Voltage ($I_C=1.5\text{Adc}$, $I_B=75\text{mAdc}$)	---	---	1.2	Vdc
f_T	Transition Frequency ($I_C=100\text{mAdc}$, $V_{CE}=2.0\text{Vdc}$)	---	100	---	MHz
C_{ob}	Collector Output Capacitance ($V_{CE}=10\text{Vdc}$, $I_E=0$, $f=1.0\text{MHz}$)	---	32	---	pF
t_{on}	Turn-on Time ($I_{B1}=I_{B2}=75\text{mAdc}$, Duty Cycle<1%)	---	0.1	---	μs
t_{stg}	Storage Time ($I_{B1}=I_{B2}=75\text{mAdc}$, Duty Cycle<1%)	---	0.2	---	μs
t_f	Fall Time ($I_{B1}=I_{B2}=75\text{mAdc}$, Duty Cycle<1%)	---	0.1	---	μs

* Mounted on ceramic substrate (250mm²x0.8t)