



**2SC4548-D**  
**2SC4548-E**

**NPN Epitaxial  
 Planar Silicon  
 Transistors**

**Features**

- Halogen free available upon request by adding suffix "-HF"
- Small Flat Package
- Low collector-to-emitter saturation voltage.
- Fast switching speed.
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
- Lead Free Finish/Rohs Compliant ("P" Suffix designates RoHS Compliant. See ordering information)

**Maximum Ratings**

Symbol	Rating	Rating	Unit
V <sub>CEO</sub>	Collector-Emitter Voltage	400	V
V <sub>CBO</sub>	Collector-Base Voltage	400	V
V <sub>EBO</sub>	Emitter-Base Voltage	5.0	V
I <sub>C</sub>	Collector Current	0.2	A
P <sub>C</sub>	Collector dissipation	500	mW
T <sub>J</sub>	Junction Temperature	-55 to +150	°C
T <sub>STG</sub>	Storage Temperature	-55 to +150	°C

**Electrical Characteristics @25°C Unless Otherwise Specified**

Symbol	Parameter	Min	Typ	Max	Units
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**OFF CHARACTERISTICS**

V <sub>(BR)CBO</sub>	Collector-Base Breakdown Voltage (I <sub>C</sub> =10uAdc, I <sub>E</sub> =0)	400	---	---	Vdc
V <sub>(BR)CEO</sub>	Collector-Emitter Breakdown Voltage (I <sub>C</sub> =1.0mAdc, I <sub>B</sub> =0)	400	---	---	Vdc
V <sub>(BR)EBO</sub>	Collector-Emitter Breakdown Voltage (I <sub>E</sub> =10uAdc, I <sub>C</sub> =0)	5.0	---	---	Vdc
I <sub>CBO</sub>	Collector Cutoff Current (V <sub>CB</sub> =300Vdc, I <sub>E</sub> =0)	---	---	0.1	uAdc
I <sub>EBO</sub>	Emitter Cutoff Current (V <sub>EB</sub> =4.0Vdc, I <sub>C</sub> =0)	---	---	0.1	mAdc

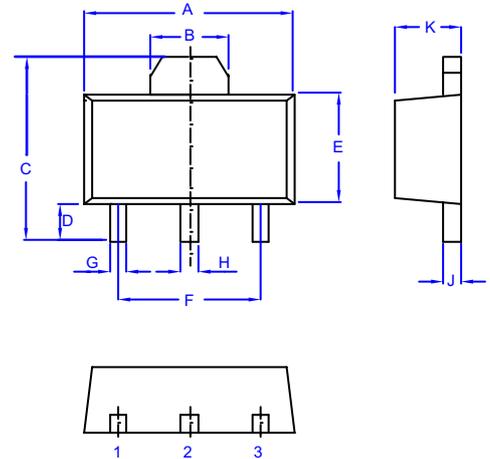
**ON CHARACTERISTICS**

h <sub>FE</sub>	DC Current Gain (I <sub>C</sub> =50mAdc, V <sub>CE</sub> =10Vdc)	60	---	200	---
V <sub>CE(sat)</sub>	Collector-Emitter Saturation Voltage (I <sub>C</sub> =50mAdc, I <sub>B</sub> =5mAdc)			0.6	Vdc
V <sub>BE(sat)</sub>	Collector-Emitter Saturation Voltage (I <sub>C</sub> =50mAdc, I <sub>B</sub> =5mAdc)			1.0	Vdc
f <sub>T</sub>	Gain-Bandwidth product (V <sub>CE</sub> =30V, I <sub>C</sub> =10mA, )	---	70	---	MHz
Cob	Out Capacitance (V <sub>CB</sub> =30V, f=1.0MHz, I <sub>E</sub> =0)	---	4	---	pF

**h<sub>FE1</sub> CLASSIFICATION**

Rank	D	E
Range	60-120	100-200
Marking	CN	

**SOT-89**



1. Base
2. Collector
3. Emitter

DIM	DIMENSINS				NOTES
	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	.173	.181	4.39	4.60	
B	.061	-----	1.55	-----	REF.
C	.154	.165	3.91	4.25	
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	



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### Ordering Information :

Device	Packing
Part Number-TP	Tape&Reel; 1Kpcs/ Reel

Note : Adding "-HF" suffix for halogen free, eg. Part Number-TP-HF

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