



Micro Commercial Components



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## 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
$V_{CEO}$	Collector-Emitter Voltage	400	V
$V_{CBO}$	Collector-Base Voltage	400	V
$V_{EBO}$	Emitter-Base Voltage	5.0	V
$I_C$	Collector Current	0.2	A
$P_C$	Collector dissipation	500	mW
$T_J$	Junction Temperature	-55 to +150	°C
$T_{STG}$	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

$V_{(BR)CBO}$	Collector-Base Breakdown Voltage ( $I_C=10\mu A$ , $I_E=0$ )	400	---	---	Vdc
$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage ( $I_C=1.0mA$ , $I_B=0$ )	400	---	---	Vdc
$V_{(BR)EBO}$	Collector-Emitter Breakdown Voltage ( $I_C=10\mu A$ , $I_E=0$ )	5.0	---	---	Vdc
$I_{CBO}$	Collector Cutoff Current ( $V_{CB}=300V$ , $I_E=0$ )	---	---	0.1	$\mu A$
$I_{EBO}$	Emitter Cutoff Current ( $V_{EB}=4.0V$ , $I_C=0$ )	---	---	0.1	mA

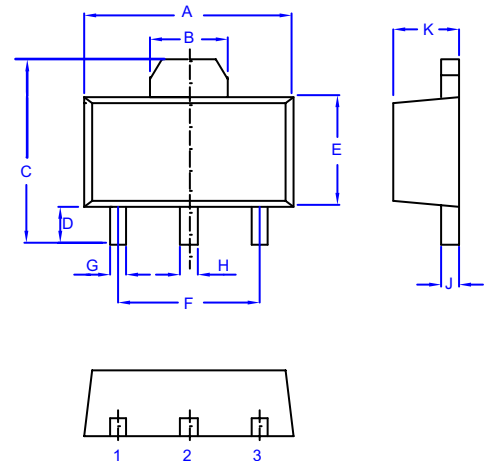
#### ON CHARACTERISTICS

$h_{FE}$	DC Current Gain ( $I_C=50mA$ , $V_{CE}=10V$ )	60	---	200	---
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage ( $I_C=50mA$ , $I_B=5mA$ )			0.6	Vdc
$V_{BE(sat)}$	Collector-Emitter Saturation Voltage ( $I_C=50mA$ , $I_B=5mA$ )			1.0	Vdc
$f_T$	Gain-Bandwidth product ( $V_{CE}=30V$ , $I_C=10mA$ )	---	70	---	MHz
$C_{ob}$	Out Capacitance ( $V_{CB}=30V$ , $f=1.0MHz$ , $I_E=0$ )	---	4	---	pF

#### $h_{FE}$ CLASSIFICATION

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

### SOT-89



1. Base
2. Collector
3. Emitter

DIM	DIMENSIONS				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; 1 Kpcs/ Reel

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

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