



TR BC393;TO18;tranzystor; PNP;0.1A;180V;400mW;50MHz



Dane techniczne:

Nazwa: BC393

Typ tranzystora: bipolarny

Kierunek przewodnictwa: PNP

Prąd kolektora: 0.1A

Napięcie kolektor-emiter: 180V

Moc: 0.4W

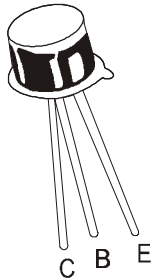
Obudowa: TO18

Montaż: przewlekany (THT)

SILICON PLANAR TRANSISTORS

BC393 PNP
BC394 NPN

TO-18
Metal Can Package



High Voltage Transistors

ABSOLUTE MAXIMUM RATINGS

DESCRIPTION	SYMBOL	BC393	BC394	UNIT
Collector Emitter Voltage	V_{CEO}	180	180	V
Collector Base Voltage	V_{CBO}	180	180	V
Emitter Base Voltage	V_{EBO}	6		V
Collector Current Continuous	I_C	0.50		A
Power Dissipation @ $T_a=25^\circ\text{C}$ Derate Above 25°C	P_D	0.40	2.27	W mW/ $^\circ\text{C}$
Power Dissipation @ $T_c=25^\circ\text{C}$ Derate Above 25°C	P_D	1.40	8.00	W mW/ $^\circ\text{C}$
Operating and Storage Junction Temperature Range	T_j, T_{stg}	- 65 to +200		$^\circ\text{C}$

THERMAL CHARACTERISTICS

Junction to Ambient in free air	$R_{th(j-a)}$	440	$^\circ\text{C/W}$
Junction to Case	$R_{th(j-c)}$	125	$^\circ\text{C/W}$

ELECTRICAL CHARACTERISTICS ($T_a=25^\circ\text{C}$ unless specified otherwise)

DESCRIPTION	SYMBOL	TEST CONDITION	MIN	TYP	MAX	UNIT
Collector Emitter Voltage	V_{CEO}	$I_C=10\text{mA}, I_B=0$	180			V
Collector Base Voltage	V_{CBO}	$I_C=100\mu\text{A}, I_E=0$	180			V
Emitter Base Voltage	V_{EBO}	$I_E=100\mu\text{A}, I_C=0$	6			V
Collector Cut off Current	I_{CBO}	$V_{CB}=100\text{V}, I_E=0$			50	nA
Collector Cut off Current	I_{CEO}	$V_{CE}=100\text{V}, I_B=0, T_a=150^\circ\text{C}$			50	μA
DC Current Gain	$*h_{FE}$	$I_C=10\text{mA}, V_{CE}=10\text{V}$	50			
Collector Emitter Saturation Voltage	$*V_{CE(sat)}$	$I_C=10\text{mA}, I_B=1\text{mA}$			0.3	V
Base Emitter Saturation Voltage	$*V_{BE(sat)}$	$I_C=10\text{mA}, I_B=1\text{mA}$			0.9	V

*Pulse Test: Pulse width=300ms, Duty cycle = 2%

DYNAMIC CHARACTERISTICS

DESCRIPTION	SYMBOL	TEST CONDITION	MIN	TYP	MAX	UNIT
Transition frequency	f_T	$I_C=20\text{mA}, V_{CE}=20\text{V}, f=20\text{MHz}$	50		200	MHz
Output Capacitance	C_{ob}	$V_{CB}=20\text{V}, I_E=0, f=1\text{MHz}$			7	pF
Input Capacitance	C_{ib}	$V_{EB}=0.5\text{V}, I_C=0, f=1\text{MHz}$		75		pF

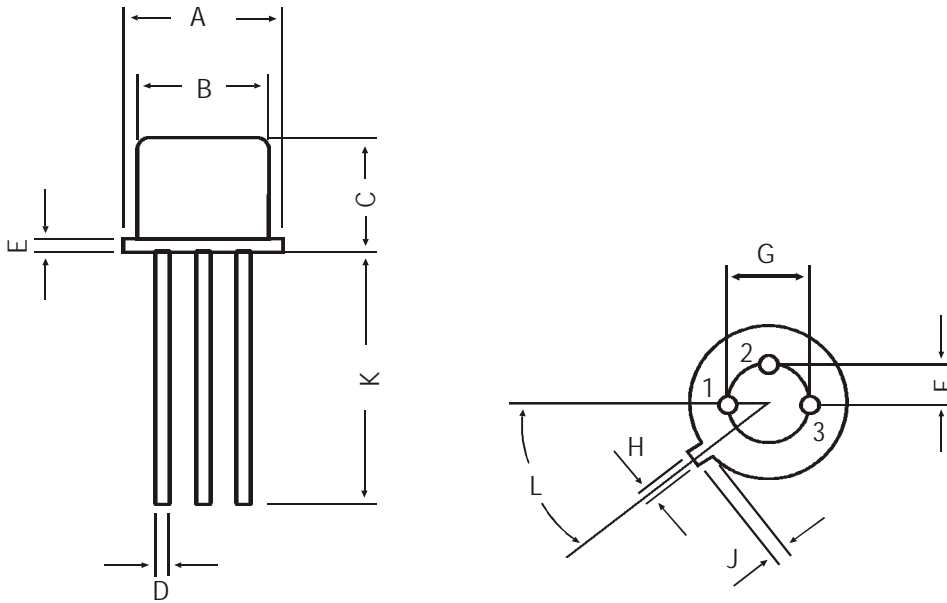
SWITCHING TIMES

DESCRIPTION	SYMBOL	TEST CONDITION	MIN	TYP	MAX	UNIT
Turn on Time	t_{on}	$I_C=50\text{mA}, I_{B1}=10\text{mA}, V_{CC}=100\text{V}$		100		ns
Turn off Time	t_{off}	$I_C=50\text{mA}, I_{B2}=10\text{mA}, V_{CC}=100\text{V}$		400		ns

BC393 PNP
BC394 NPN

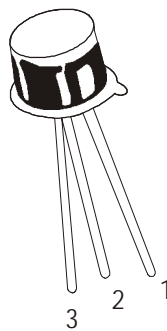
TO-18
Metal Can Package

TO-18 Metal Can Package



All dimensions in mm.

DIM	MIN	MAX
A	5.24	5.84
B	4.52	4.97
C	4.31	5.33
D	0.40	0.53
E	—	0.76
F	—	1.27
G	—	2.97
H	0.91	1.17
J	0.71	1.21
K	12.70	—
L	45 DEG	



PIN CONFIGURATION

1. EMITTER
2. BASE
3. COLLECTOR

Packing Details

PACKAGE	STANDARD PACK		INNER CARTON BOX		OUTER CARTON BOX		
	Details	Net Weight/Qty	Size	Qty	Size	Qty	Gr Wt
TO-18	1K/polybag	350 gm/1K pcs	3" x 7.5" x 7.5"	5K	17" x 15" x 13.5"	80K	34 kgs

Disclaimer

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