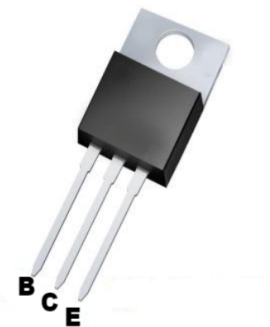




### 1.Features

- General purpose circuits
- Audio amplifier
- Power linear and switching

Case:TO-220



### 2.Mechanical Data

- Case:Molded Plastic,TO-220
- Epoxy:UL 94V-0 rate flame retardant
- Terminals:Plated Leads Solderable per MIL-STD-750,Method-2026.
- Marking: marked on body.
- Mounting Position : Any.

### 3.Maximum Ratings and Electrical Characteristics

Rating at 25°C Cambient temperature unless otherwise specified

Parameters		Symbol	Value	Unit
Collector-Base Voltage		$V_{CBO}$	-100	V
Collector-Emitter Voltage		$V_{CEO}$	-100	V
Emitter-Base Voltage		$V_{EBO}$	-5	V
Collector Current -Continuous		$I_C$	-6	A
Collector peak current		$I_{CM}$	-10	A
Base Current		$I_B$	-2	A
Power Dissipation	$T_A=25^{\circ}C$	$P_C$	2	W
	$T_C=25^{\circ}C$		65	
Junction Temperature		$T_J$	150	$^{\circ}C$
Operating and Storage Temperature Range		$T_{stg}$	-65 to +150	$^{\circ}C$

### 4.Electrical Characteristics (TA=25°C unless otherwise noted)

Parameters	Symbol	Cindition	Min	TYP	Max	Unit
Collector-emitter breakdown voltage	$V_{CEO(SUS)}$	$I_C = -10mA, I_B = 0$	-100	-	-	V
Collector cut-off current	$I_{CES}$	$V_{CE} = -100V, I_E = 0$	-	-	-0.4	mA
Collector cut-off current	$I_{CEO}$	$V_{CB} = -60V, I_E = 0$	-	-	-0.7	mA
Emitter cut-off current	$I_{EBO}$	$V_{CB} = -5V, I_C = 0$	-	-	-1	mA
*DC current gain	$h_{FE}$	$V_{CE} = -4V, I_C = -0.3A$	30	-	-	-
		$V_{CE} = -4V, I_C = -3A$	15			
*Collector-emitter saturation voltage*	$V_{CE(sat)}$	$I_C = -6A, I_B = -0.6A$	-	-	-1.5	V
*Base-emitter saturation voltage	$V_{BE(sat)}$	$I_C = -6A, I_B = -0.6A$	-	-	-2	V
Transition frequency	$f_T$	$V_{CE} = -10V, I_B = -0.5A$	3	-	-	MHz

• Pulsed: Pulse duration  $\leq 300\mu s$ , duty cycle 2 %



### 6. Rating And Characteristic Curves

Fig.1 DC current Gain

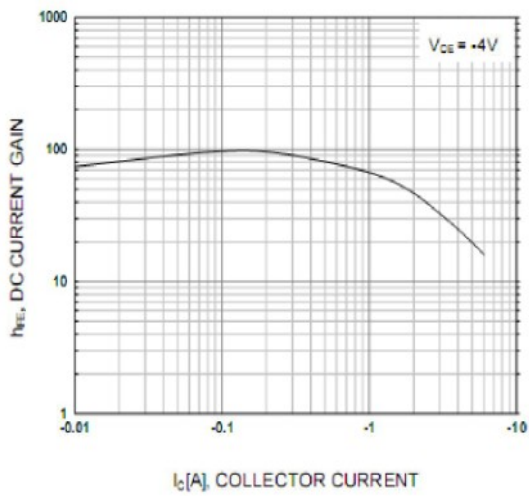


Fig.2 Base-Emitter/Collector-Emitter Saturation Voltage

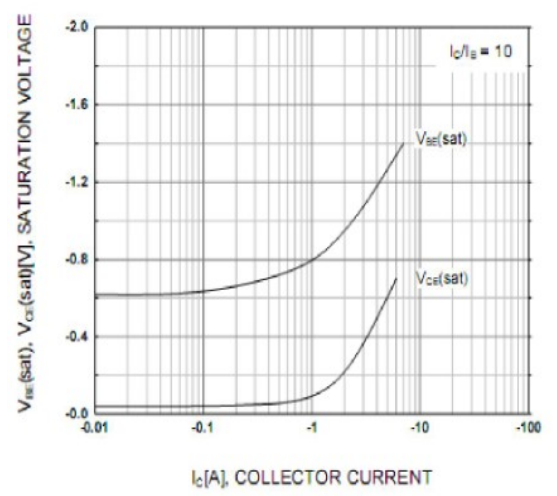


Fig.3 Safe Operating Area

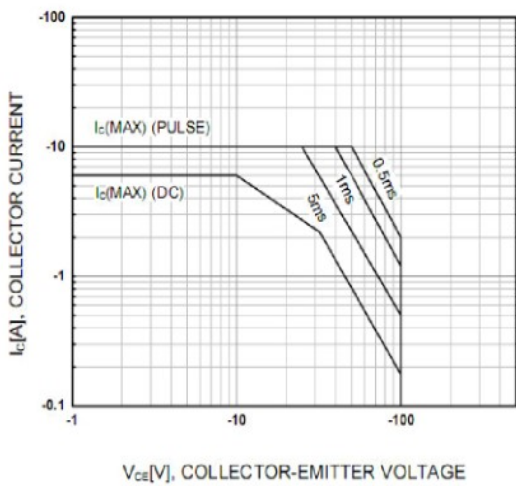
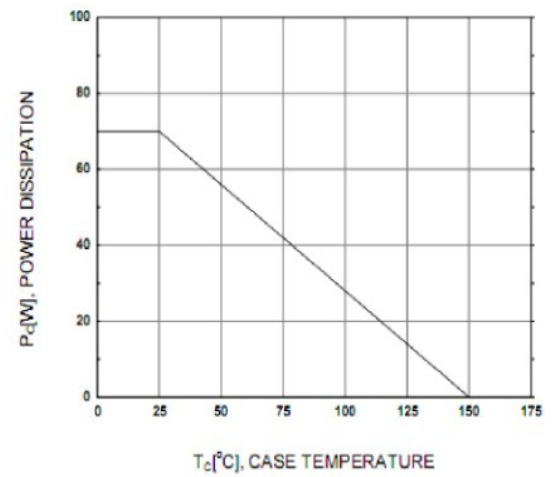
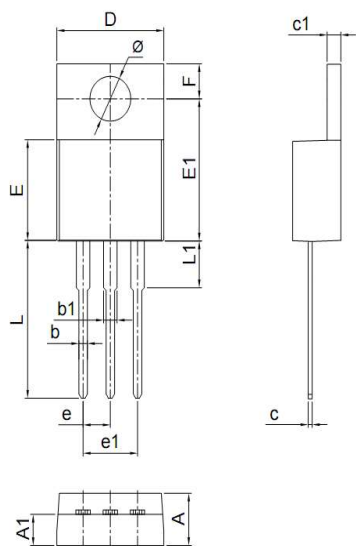


Fig.4 Power derating



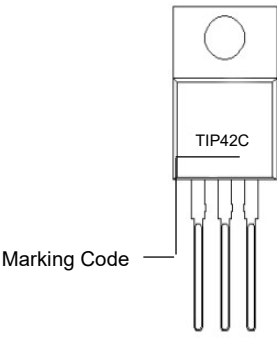
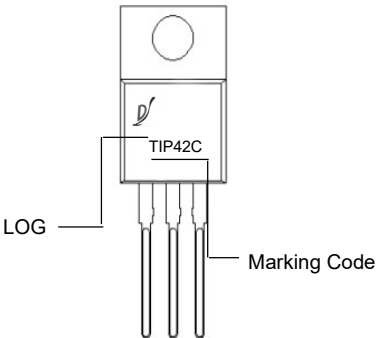


7.Dimensions



Dimensions	Inches		Millimeters	
	Min	Max	Min	Max
A	0.169	0.184	4.30	4.67
A1	0.098	0.111	2.50	2.82
b	0.028	0.036	0.70	0.91
b1	0.046	0.055	1.17	1.40
c	0.012	0.024	0.30	0.60
c1	0.045	0.055	1.15	1.40
D	0.390	0.402	9.90	10.20
E	0.335	0.354	8.50	9.00
E1	0.472	0.492	12.00	12.50
e	0.094	0.104	2.40	2.64
F	0.102	0.110	2.60	2.80
L	0.520	0.543	13.20	13.80
L1	0.150	0.165	3.80	4.20
Φ	0.139	0.163	3.54	4.14

8. Part Marking System



9. Package Information

Package	Packing Type	Quantity(pcs)
TO-220	Tube	50



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