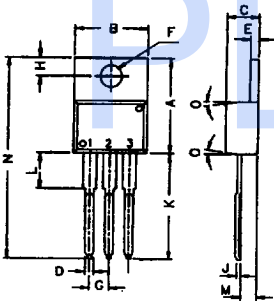
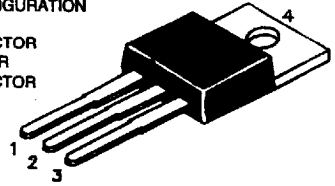


BD243, 243A, 243B, 243C NPN PLASTIC POWER TRANSISTORS
BD244, 244A, 244B, 244C PNP PLASTIC POWER TRANSISTORS
 General Purpose Amplifier and Switching Applications

PIN CONFIGURATION
 1. BASE
 2. COLLECTOR
 3. EMITTER
 4. COLLECTOR



ALL DIMENSIONS ARE IN M.M.

DIM	MIN	MAX
A	14,42	16,51
B	9,63	10,67
C	3,56	4,83
D	-	0,90
E	1,15	1,40
F	3,75	3,88
G	2,29	2,79
H	2,54	3,43
J	-	0,56
K	12,70	14,73
L	-	6,35
M	2,03	2,92
N	-	31,24
O	7	DEG

ABSOLUTE MAXIMUM RATINGS

		243	243A	243B	243C	
		244	244A	244B	244C	
Collector-base voltage (open emitter)	V_{CBO}	max. 45	60	80	100	V
Collector-emitter voltage (open base)	V_{CEO}	max. 45	60	80	100	V
Collector current	I_C	max.	6.0			A
Total power dissipation up to $T_C = 25^\circ\text{C}$	P_{tot}	max.	65			W
Junction temperature	T_j	max.	150			$^\circ\text{C}$
Collector-emitter saturation voltage	V_{CEsat}	max.	1.5			V
$I_C = 6 \text{ A}; I_B = 1 \text{ A}$						
D.C. current gain	h_{FE}	min.	30			
$I_C = 0.3 \text{ A}; V_{CE} = 4 \text{ V}$						

RATINGS (at $T_A = 25^\circ\text{C}$ unless otherwise specified)

Limiting values		243	243A	243B	243C	
		244	244A	244B	244C	
Collector-base voltage (open emitter)	V_{CBO}	max. 45	60	80	100	V
Collector-emitter voltage (open base)	V_{CEO}	max. 45	60	80	100	V
Emitter-base voltage (open collector)	V_{EBO}	max.	5.0			V



Collector current	I_C	max.	6.0	A
Collector current (Peak)	I_C	max.	10	A
Base current	I_B	max.	2.0	A
Total power dissipation upto $T_C=25^\circ\text{C}$	P_{tot}	max.	65	W
Junction temperature	T_j	max.	150	$^\circ\text{C}$
Storage temperature	T_{stg}		-65 to +150	$^\circ\text{C}$

THERMAL RESISTANCE

From junction to case	$R_{th\ j-c}$		1.92	$^\circ\text{C}/\text{W}$
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CHARACTERISTICS

$T_{amb} = 25^\circ\text{C}$ unless otherwise specified

			243	243A	243B	243C	
			244	244A	244B	244C	
Collector cutoff current							
$I_B = 0; V_{CE} = 30\text{ V}$	I_{CEO}	max.	0.7	0.7	-	-	mA
$I_B = 0; V_{CE} = 60\text{ V}$	I_{CEO}	max.	-	-	0.7	0.7	mA
$V_{BE} = 0; V_{CE} = V_{CEO}$	I_{CES}	max.		0.4			mA
Emitter cut-off current							
$I_C = 0; V_{EB} = 5\text{ V}$	I_{EBO}	max.		1.0			mA
Breakdown voltages							
$I_C = 30\text{ mA}; I_B = 0$	$V_{CEO(sus)}^*$	min.	45	60	80	100	V
$I_C = 1\text{ mA}; I_E = 0$	V_{CBO}	min.	45	60	80	100	V
$I_E = 1\text{ mA}; I_C = 0$	V_{EBO}	min.		5.0			V
Saturation voltage							
$I_C = 6\text{ A}; I_B = 1\text{ A}$	V_{CEsat}^*	max.		1.5			V
Base emitter on voltage							
$I_C = 6\text{ A}; V_{CE} = 4\text{ V}$	$V_{BE(on)}^*$	max.		2.0			V
D.C. current gain							
$I_C = 0.3\text{ A}; V_{CE} = 4\text{ V}$	h_{FE}^*	min.		30			
$I_C = 3\text{ A}; V_{CE} = 4\text{ V}$	h_{FE}^*	min.		15			
Small signal current gain							
$I_C = 0.5\text{ A}; V_{CE} = 10\text{ V}; f = 1\text{ KHz}$	h_{fe}	min.		20			
Transition frequency							
$I_C = 0.5\text{ A}; V_{CE} = 10\text{ V}; f = 1\text{ MHz}$	$f_T(1)$	min.		3			MHz

* Pulse Test: Pulse width $\leq 300\ \mu\text{s}$; duty cycle $\leq 2\%$.

(1) $f_T = |h_{fe}| \cdot f_{test}$