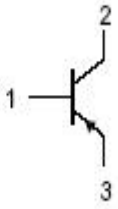
isc Silicon PNP Power Transistor — BD240/A/B/C

DESCRIPTION

- DC Current Gain -h_{FE} = 40(Min)@ I_C= -0.2A
- Collector-Emitter Sustaining Voltage-
  : $V_{CEO(SUS)}$ = -45V(Min)- BD240; -60V(Min)- BD240A
  -80V(Min)- BD240B; -100V(Min)- BD240C
- Complement to Type BD239/A/B/C
- Minimum Lot-to-Lot variations for robust device performance and reliable operation



PIN: 1 Base
2 Collector
3 Emitter
TO-220C package

APPLICATIONS

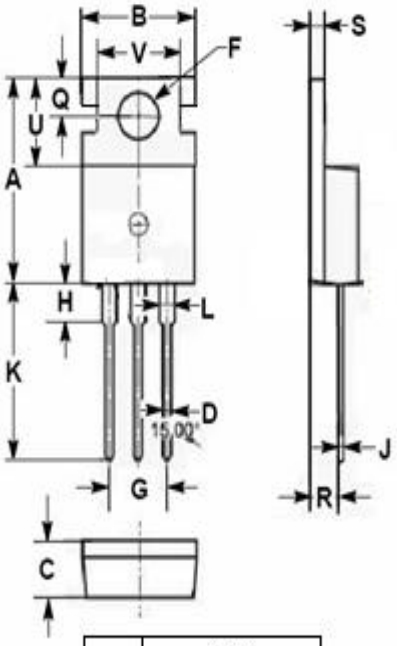
- Designed for medium power linear and switching applicatio

ABSOLUTE MAXIMUM RATINGS(T_a=25℃)

SYMBOL	PARAMETER		VALUE	UNIT
V_{CER}	Collector-Emitter Voltage	BD240	-55	V
		BD240A	-70	
		BD240B	-90	
		BD240C	-115	
V_{CEO}	Collector-Emitter Voltage	BD240	-45	V
		BD240A	-60	
		BD240B	-80	
		BD240C	-100	
V_{EBO}	Emitter-Base Voltage		-5	V
I_C	Collector Current-Continuous		-2	A
I_{CM}	Collector Current-Peak		-4	A
I_B	Base Current		-0.6	A
P_C	Collector Power Dissipation @ T_C=25℃		30	W
T_J	Junction Temperature		150	℃
T_{stg}	Storage Temperature Range		-65~150	℃

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j\text{-}c}$	Thermal Resistance, Junction to Case	4.17	℃/W



DIM	mm MIN	MAX
A	15.50	15.90
B	9.80	10.20
C	4.20	4.50
D	0.70	0.90
F	3.40	3.70
G	4.98	5.18
H	2.68	2.90
J	0.44	0.60
K	12.80	13.40
L	1.20	1.45
Q	2.70	2.90
R	2.30	2.70
S	1.29	1.35
U	6.45	6.65
V	8.66	8.86

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ELECTRICAL CHARACTERISTICS

T_C=25℃ unless otherwise specified

SYMBOL	PARAMETER		CONDITIONS	MIN	MAX	UNIT
$V_{CEO(SUS)}$	Collector-Emitter Sustaining Voltage	BD240	I_C= -30mA; I_B= 0	-45		V
		BD240A		-60		
		BD240B		-80		
		BD240C		-100		
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage		I_C= -1A; I_B= -0.2A		-0.7	V
$V_{BE(on)}$	Base-Emitter On Voltage		I_C= -1A; V_{CE}= -4V		-1.3	V
I_{CES}	Collector Cutoff Current	BD240	V_{CE}= -45V; V_{BE}= 0		-0.2	mA
		BD240A	V_{CE}= -60V; V_{BE}= 0			
		BD240B	V_{CE}= -80V; V_{BE}= 0			
		BD240C	V_{CE}= -100V; V_{BE}= 0			
I_{CEO}	Collector Cutoff Current	BD240/A	V_{CE}= -30V; I_B= 0		-0.3	mA
		BD240B/C	V_{CE}= -60V; I_B= 0			
I_{EBO}	Emitter Cutoff Current		V_{EB}= -5V; I_C=0		-1.0	mA
h_{FE-1}	DC Current Gain		I_C= -0.2A; V_{CE}= -4V	40		
h_{FE-2}	DC Current Gain		I_C= -1A; V_{CE}= -4V	15		