

isc Silicon PNP Power Transistors

BD750/750A

DESCRIPTION

- Collector-Emitter Sustaining Voltage-
: $V_{CEO(SUS)} = -90V(\text{Min})$ - BD750
= $-120V(\text{Min})$ - BD750A
- High Power Dissipation
- Complement to Type BD751/751A

APPLICATIONS

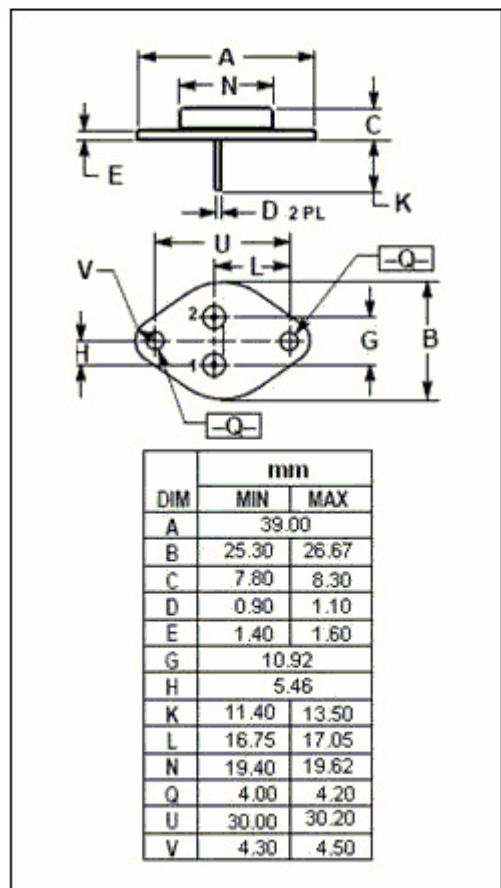
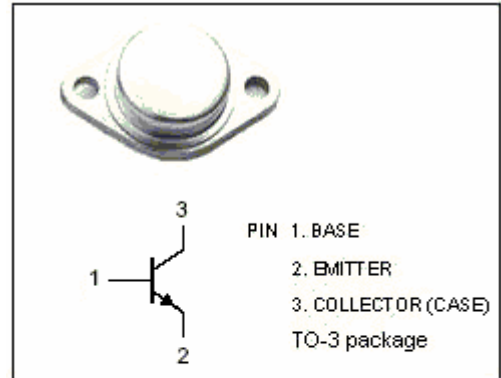
- Designed for high voltage and high power amplifier applications.

ABSOLUTE MAXIMUM RATINGS($T_a=25^\circ\text{C}$)

SYMBOL	PARAMETER	VALUE	UNIT	
V_{CEV}	Collector-Emitter Voltage	BD750	-100	V
		BD750A	-130	
$V_{CEO(SUS)}$	Collector-Emitter Voltage	BD750	-90	V
		BD750A	-120	
V_{EBO}	Emitter-Base Voltage	-7	V	
I_C	Collector Current-Continuous	-20	A	
I_B	Base Current-Continuous	-5	A	
P_C	Collector Power Dissipation@ $T_C=25^\circ\text{C}$	200	W	
T_J	Junction Temperature	200	$^\circ\text{C}$	
T_{stg}	Storage Temperature	-65~200	$^\circ\text{C}$	

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j-c}$	Thermal Resistance,Junction to Case	0.875	$^\circ\text{C/W}$



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ELECTRICAL CHARACTERISTICS

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

SYMBOL	PARAMETER		CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{\text{CEO(SUS)}}$	Collector-Emitter Sustaining Voltage	BD750	$I_C = -100\text{mA}; I_B = 0$	-90			V
		BD750A		-120			
$V_{\text{CE(sat)}}$	Collector-Emitter Saturation Voltage	BD750	$I_C = -7.5\text{A}; I_B = -0.75\text{A}$			-1.5	V
		BD750A	$I_C = -5\text{A}; I_B = -0.5\text{A}$			-1.0	
$V_{\text{BE(sat)}}$	Base-Emitter Saturation Voltage	BD750	$I_C = -7.5\text{A}; I_B = -0.75\text{A}$			-1.8	V
		BD750A	$I_C = -5\text{A}; I_B = -0.5\text{A}$			-1.8	
I_{CEV}	Collector Cutoff Current	BD750	$V_{\text{CEV}} = -100\text{V}; V_{\text{BE(off)}} = -1.5\text{V}$			-0.5	mA
		BD750A	$V_{\text{CEV}} = -130\text{V}; V_{\text{BE(off)}} = -1.5\text{V}$			-0.5	
I_{EBO}	Emitter Cutoff Current		$V_{\text{EB}} = -7\text{V}; I_C = 0$			-1.0	mA
h_{FE}	DC Current Gain	BD750	$I_C = -7.5\text{A}; V_{\text{CE}} = -2\text{V}$	15		60	
		BD750A	$I_C = -5\text{A}; V_{\text{CE}} = -2\text{V}$	25		100	
f_T	Current-Gain—Bandwidth Product		$I_C = -0.5\text{A}; V_{\text{CE}} = -10\text{V}; f_{\text{test}} = 1\text{MHz}$	4			MHz