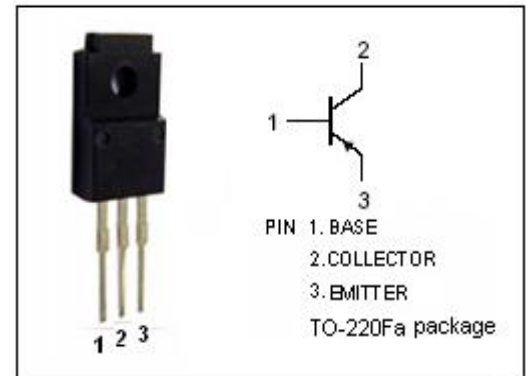


isc Silicon PNP Power Transistor
BD944F/946F/948F
DESCRIPTION

- DC Current Gain-
: $h_{FE} = 85(\text{Min}) @ I_C = -500\text{mA}$
- Complement to Type BD943F/945F/947F
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

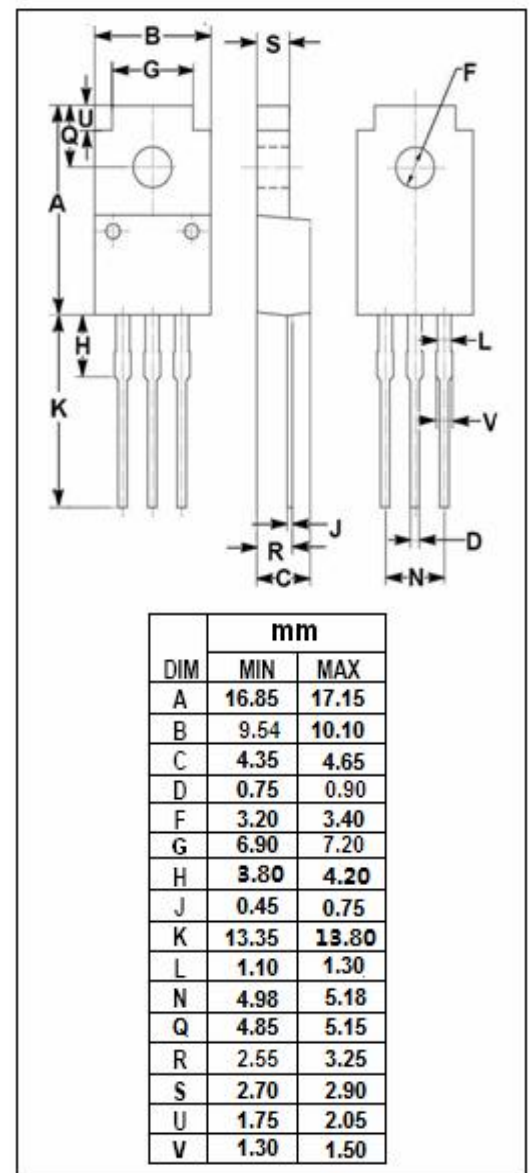
- Designed for use in audio output stages and general purpose amplifier applications.


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

SYMBOL	PARAMETER	VALUE	UNIT	
V_{CBO}	Collector-Base Voltage	BD944F	-22	V
		BD946F	-32	
		BD948F	-45	
V_{CEO}	Collector-Emitter Voltage	BD944F	-22	V
		BD946F	-32	
		BD948F	-45	
V_{EBO}	Emitter-Base Voltage	-5	V	
I_C	Collector Current-Continuous	-5	A	
I_{CM}	Collector Current-Peak	-8	A	
I_B	Base Current-Continuous	-1	A	
P_C	Collector Power Dissipation @ $T_C=25^\circ\text{C}$	22	W	
T_J	Junction Temperature	150	$^\circ\text{C}$	
T_{stg}	Storage Temperature Range	-65~150	$^\circ\text{C}$	

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j-c}$	Thermal Resistance, Junction to Case	7.93	$^\circ\text{C/W}$



isc Silicon PNP Power Transistor
BD944F/946F/948F
ELECTRICAL CHARACTERISTICS

 T_C=25°C unless otherwise specified

SYMBOL	PARAMETER		CONDITIONS	MIN	TYP.	MAX	UNIT
V _{CE0(SUS)}	Collector-Emitter Sustaining Voltage	BD944F	I _C = -30mA ; I _B = 0	-22			V
		BD946F		-32			
		BD948F		-45			
V _{CE(sat)}	Collector-Emitter Saturation Voltage	BD944F/946F	I _C = -2A; I _B = -0.2A			-0.5	V
		BD948F	I _C = -3A; I _B = -0.3A			-0.7	
V _{BE(on)}	Base-Emitter On Voltage	BD944F/946F	I _C = -2A; V _{CE} = -1V			-1.1	V
		BD948F	I _C = -3A; V _{CE} = -1V			-1.3	
I _{CBO}	Collector Cutoff Current		V _{CB} = V _{CB0max} ; I _E = 0 V _{CB} = V _{CB0max} ; I _E = 0, T _J =150°C			-0.05 -1	mA
I _{CEO}	Collector Cutoff Current	BD944F	V _{CE} = -15V; I _B = 0			-0.1	mA
		BD946F	V _{CE} = -20V; I _B = 0				
		BD948F	V _{CE} = -25V; I _B = 0				
I _{EBO}	Emitter Cutoff Current		V _{EB} = -5V; I _C = 0			-0.2	mA
h _{FE-1}	DC Current Gain		I _C = -10mA ; V _{CE} = -5V	25			
h _{FE-2}	DC Current Gain		I _C = -500mA ; V _{CE} = -1V	85		475	
h _{FE-3}	DC Current Gain	BD944F/946F	I _C = -2A ; V _{CE} = -1V	50			
		BD948F		40			
h _{FE-4}	DC Current Gain—Only For BD948F		I _C = -3A ; V _{CE} = -1V	30			
f _T	Current-Gain—Bandwidth Product		I _C = -250mA ; V _{CE} = -1V	3			MHz

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