

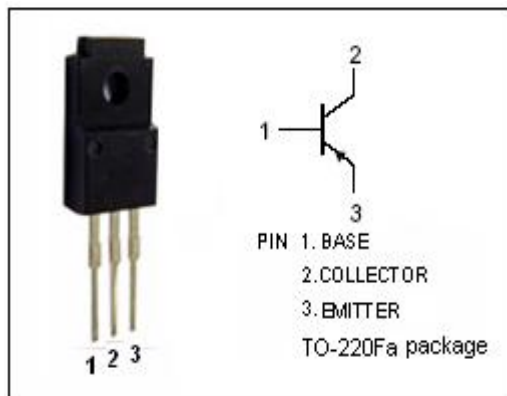
isc Silicon PNP Power Transistor **BD934F/936F/938F/940F/942F**

DESCRIPTION

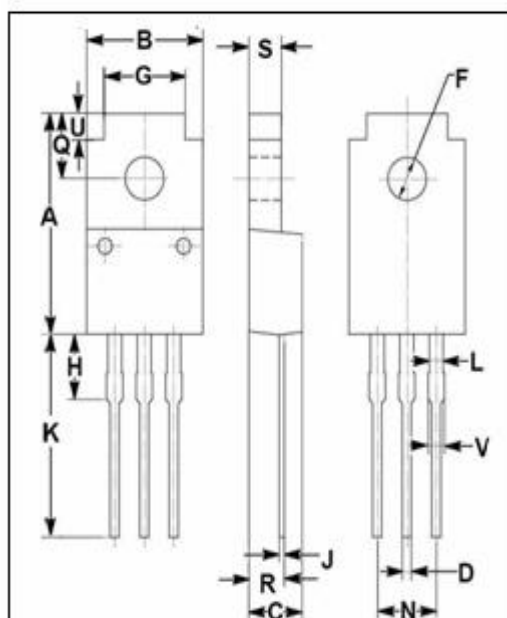
- DC Current Gain-
: $h_{FE} = 40(\text{Min}) @ I_C = -150\text{mA}$
- Complement to Type BD933F/935F/937F/939F/941F
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Designed for use in output stages of audio and television amplifier circuits where high peak powers can occur.


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

SYMBOL	PARAMETER	VALUE	UNIT	
V_{CBO}	Collector-Base Voltage	BD934F	-45	V
		BD936F	-60	
		BD938F	-100	
		BD940F	-120	
		BD942F	-140	
V_{CEO}	Collector-Emitter Voltage	BD934F	-45	V
		BD936F	-60	
		BD938F	-80	
		BD940F	-100	
		BD942F	-120	
V_{EBO}	Emitter-Base Voltage	-5	V	
I_C	Collector Current-Continuous	-3	A	
I_{CM}	Collector Current-Peak	-7	A	
I_B	Base Current-Continuous	-0.5	A	
P_C	Collector Power Dissipation @ $T_C=25^\circ\text{C}$	19	W	
T_J	Junction Temperature	150	$^\circ\text{C}$	
T_{stg}	Storage Temperature Range	-65~150	$^\circ\text{C}$	



DIM	mm	
	MIN	MAX
A	16.85	17.15
B	9.54	10.10
C	4.35	4.65
D	0.75	0.90
F	3.20	3.40
G	6.90	7.20
H	3.80	4.20
J	0.45	0.75
K	13.35	13.80
L	1.10	1.30
N	4.98	5.18
Q	4.85	5.15
R	2.55	3.25
S	2.70	2.90
U	1.75	2.05
V	1.30	1.50

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j-c}$	Thermal Resistance, Junction to Case	4.17	$^\circ\text{C/W}$
$R_{th\ j-a}$	Thermal Resistance, Junction to Ambient	70	$^\circ\text{C/W}$

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BD934F/936F/938F/940F/942F

ELECTRICAL CHARACTERISTICS

T_C=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT	
V _{CE0(SUS)}	Collector-Emitter Sustaining Voltage	BD934F	I _C = -30mA ; I _B = 0	45			V
		BD936F		60			
		BD938F		80			
		BD940F		100			
		BD942F		120			
V _{CE(sat)}	Collector-Emitter Saturation Voltage	I _C = -1A; I _B = -0.1A			-0.6	V	
V _{BE(on)}	Base-Emitter On Voltage	I _C = -1A; V _{CE} = -2V			-1.3	V	
I _{CB0}	Collector Cutoff Current	V _{CB} = V _{CB0max} ; I _E = 0 V _{CB} = V _{CB0max} ; I _E = 0, T _J =150°C			-0.05 -1.0	mA	
I _{CEO}	Collector Cutoff Current	V _{CE} = V _{CE0max} ; I _B = 0			-0.1	mA	
I _{EBO}	Emitter Cutoff Current	V _{EB} = -5V; I _C = 0			-0.2	mA	
h _{FE-1}	DC Current Gain	I _C = -150mA ; V _{CE} = -2V	40		250		
h _{FE-2}	DC Current Gain	I _C = -1A ; V _{CE} = -2V	25				

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