

isc Silicon NPN Power Transistor

BU134

DESCRIPTION

- Collector-Emitter Breakdown Voltage-
: $V_{(BR)CEO} = 350V(\text{Min.})$
- Collector Saturation Voltage-
: $V_{CE(sat)} = 1.0V(\text{Max.}) @ I_C = 3A$
- High Speed Switching

APPLICATIONS

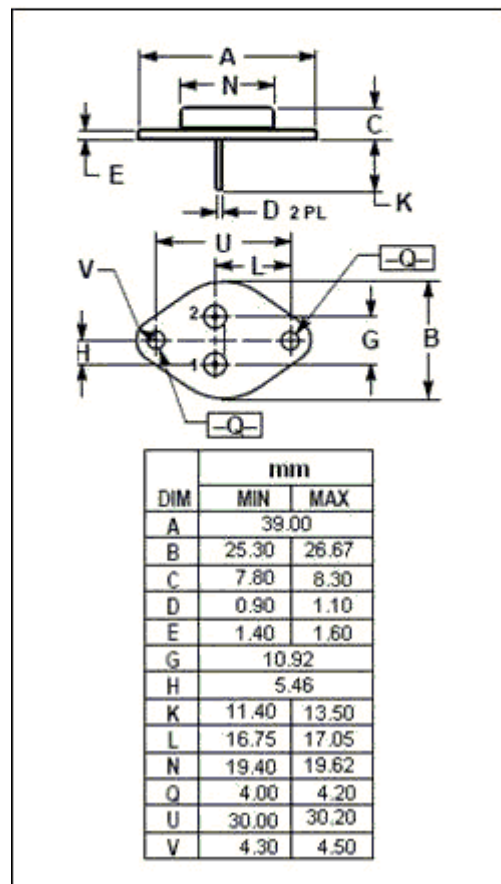
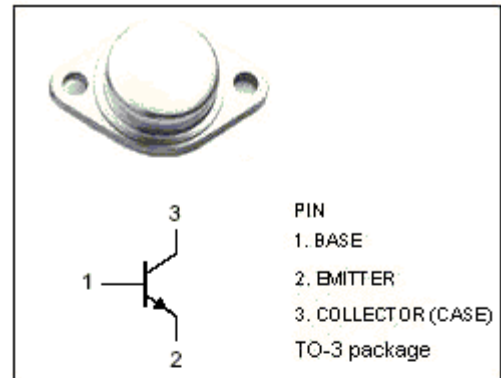
- Designed for use in color TV receiver's chopper supply.

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	500	V
V_{CEO}	Collector-Emitter Voltage	350	V
V_{EBO}	Emitter-Base Voltage	8	V
I_C	Collector Current-Continuous	4	A
I_{CM}	Collector Current-Peak	7	A
I_B	Base Current-Continuous	1	A
P_C	Collector Power Dissipation @ $T_C = 25^\circ\text{C}$	85	W
T_J	Junction Temperature	200	$^\circ\text{C}$
T_{stg}	Storage Temperature Range	-65~200	$^\circ\text{C}$

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j-c}$	Thermal Resistance, Junction to Case	2.0	$^\circ\text{C/W}$



isc Silicon NPN Power Transistor**BU134****ELECTRICAL CHARACTERISTICS** $T_C=25^{\circ}\text{C}$ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage	$I_C= 30\text{mA}; I_B= 0$	350			V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C= 3\text{A}; I_B= 0.3\text{A}$			1.0	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	$I_C= 3\text{A}; I_B= 0.3\text{A}$			1.5	V
$V_{BE(on)}$	Base-Emitter On Voltage	$I_C= 3\text{A}; V_{CE}= 5\text{V}$			1.5	V
I_{CES}	Collector Cutoff Current	$V_{CE}= 400\text{V}; V_{BE}= 0$			1.0	mA
I_{EBO}	Emitter Cutoff Current	$V_{EB}= 8\text{V}; I_C= 0$			1.0	mA
h_{FE}	DC Current Gain	$I_C= 1\text{A}; V_{CE}= 5\text{V}$	30		120	
f_T	Current-Gain—Bandwidth Product	$I_C= 0.5\text{A}; V_{CE}= 5\text{V}$	10			MHz
C_{OB}	Output Capacitance	$I_E= 0; V_{CB}= 10\text{V}; f_{test}= 1\text{MHz}$		120		pF
t_f	Fall Time	$I_C= 3\text{A}; I_{B1}= -I_{B2}= 0.6\text{A}$			1.0	μs