

**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**

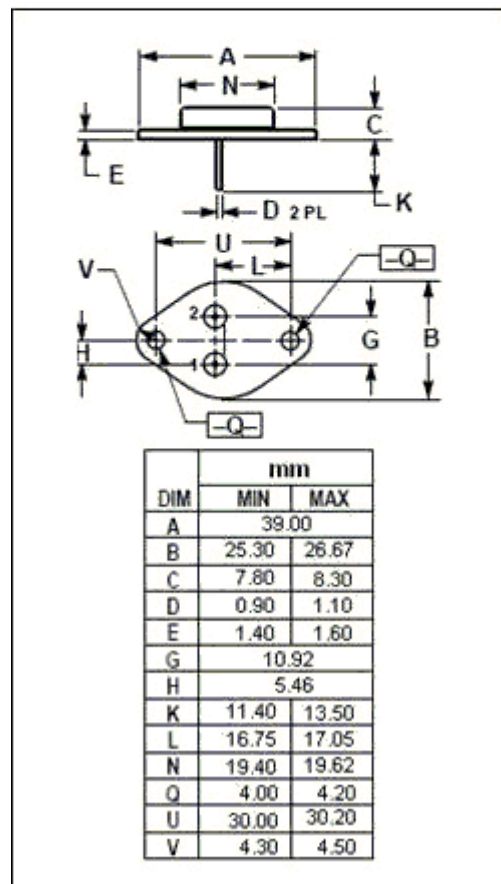
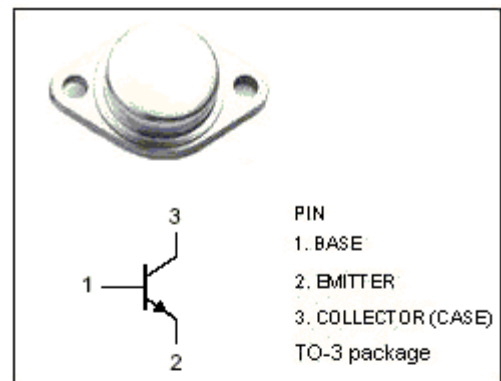
- Designed for use in color TV receiver's chopper supply.

**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	$I_E= 0; V_{CB}= 10\text{V}; f_{\text{test}}= 1\text{MHz}$		120		pF
$t_f$	Fall Time	$I_C= 3\text{A}; I_{B1}= -I_{B2}= 0.6\text{A}$			1.0	$\mu\text{s}$