

isc Silicon NPN Power Transistor

2SD1154

DESCRIPTION

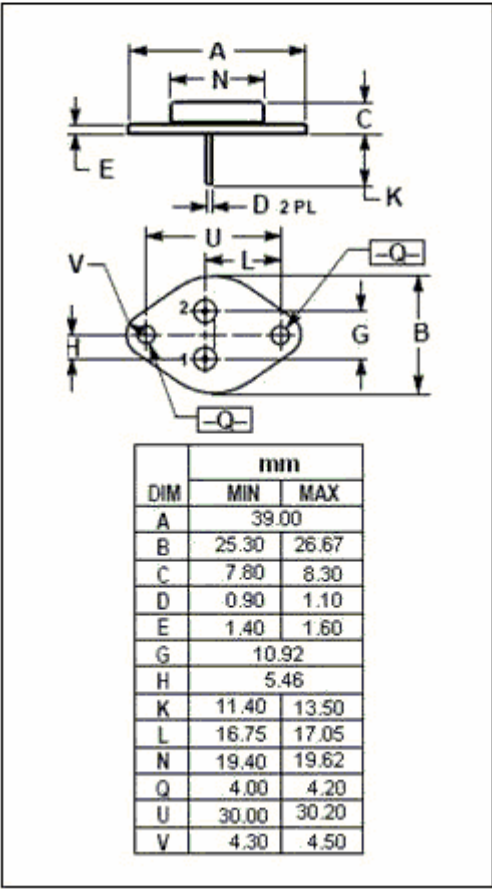
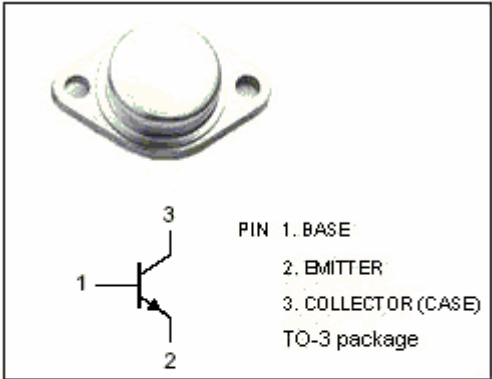
- Collector-Emitter Breakdown Voltage-
: $V_{(BR)CEO}$ = 200V (Min)
- Wide Area of Safe Operation

APPLICATIONS

- Designed for horizontal deflection output for B/W TV set.

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

SYMBOL	PARAMETER	MAX	UNIT
V_{CBO}	Collector-Base Voltage	350	V
V_{CEO}	Collector-Emitter Voltage	200	V
V_{EBO}	Emitter-Base Voltage	6	V
I_C	Collector Current-Continuous	7	A
I_{CM}	Collector Current-Peak	10	A
P_C	Collector Power Dissipation @ $T_C=25^{\circ}\text{C}$	50	W
T_j	Junction Temperature	150	$^{\circ}\text{C}$
T_{stg}	Storage Temperature Range	-65~150	$^{\circ}\text{C}$



ISC Silicon NPN Power Transistor**2SD1154****ELECTRICAL CHARACTERISTICS** $T_C=25^{\circ}\text{C}$ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage	$I_C=10\text{mA}$; $I_B=0$	200		V
$V_{(BR)EBO}$	Emitter-Base Breakdown Voltage	$I_E=5\text{mA}$; $I_C=0$	6		V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C=4\text{A}$; $I_B=0.4\text{A}$		1	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	$I_C=4\text{A}$; $I_B=0.4\text{A}$		1.2	V
I_{CES}	Collector Cutoff Current	$V_{CE}=350\text{V}$; $V_{BE}=0$		0.1	mA
		$V_{CE}=350\text{V}$; $V_{BE}=0$; $T_C=100^{\circ}\text{C}$		1	
I_{EBO}	Emitter Cutoff Current	$V_{EB}=6\text{V}$; $I_C=0$		5	mA
h_{FE}	DC Current Gain	$I_C=5\text{A}$; $V_{CE}=4\text{V}$	11	36	
t_f	Fall Time	$I_C=5\text{A}$; $I_B=0.5\text{A}$; $V_{BB}=-5\text{V}$; $R_B=0.5\Omega$		0.75	μs

◆ **h_{FE} Classifications**

R	Q	P
11-15	11-22	18-36