

isc Silicon NPN Power Transistor
3DD155
DESCRIPTION

- DC Current Gain
: $h_{FE} = 15-120 @ I_C = 1A$
- Collector-Emitter Saturation Voltage
: $V_{CE(sat)} = 1.0V(Max) @ I_C = 1A$
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

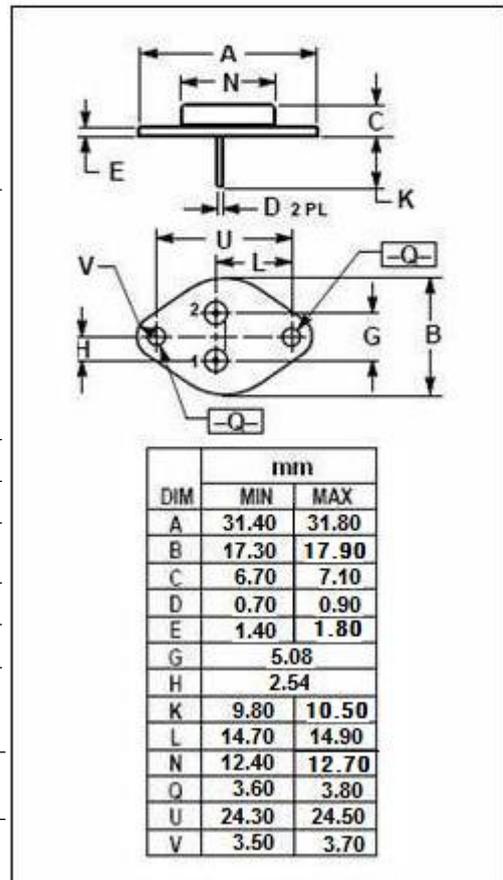
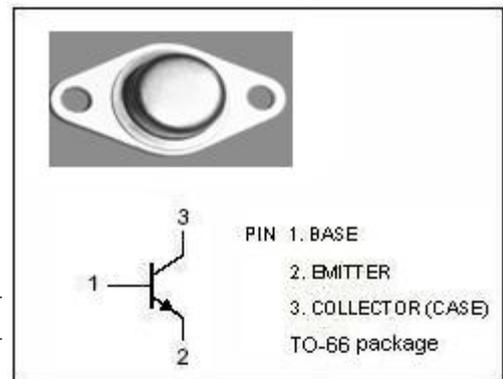
- Designed for B&W TV horizontal output , regulated power supply and power amplifier applications.

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	A	80
		B	150
		C	200
		D	250
		E	350
		F	400
V_{CEO}	Collector-Emitter Voltage	A	50
		B	100
		C	150
		D	200
		E	250
		F	300
V_{EBO}	Emitter-Base Voltage	5	V
I_C	Collector Current-Continuous	2	A
P_C	Collector Power Dissipation @ $T_C = 75^\circ C$	20	W
T_J	Junction Temperature	175	$^\circ C$
T_{stg}	Storage Temperature	-55~175	$^\circ C$

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j-c}$	Thermal Resistance, Junction to Case	5.0	$^\circ C/W$



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ELECTRICAL CHARACTERISTICS
 $T_C=25^\circ\text{C}$ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT	
$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage	$I_C=5\text{mA}; I_B=0$	A	50		V
			B	100		
			C	150		
			D	200		
			E	250		
			F	300		
$V_{(BR)CBO}$	Collector-Base Breakdown Voltage	$I_C=1\text{mA}; I_E=0$	A	80		V
			B	150		
			C	200		
			D	250		
			E	350		
			F	400		
$V_{(BR)EBO}$	Emitter-Base Breakdown Voltage	$I_E=1\text{mA}; I_C=0$	5		V	
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C=1.0\text{A}; I_B=0.1\text{A}$		1.0	V	
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	$I_C=1.0\text{A}; I_B=0.1\text{A}$		1.5	V	
I_{CEO}	Collector Cutoff Current	$V_{CE}=V_{(BR)CEO}; I_B=0$		1.0	mA	
I_{CBO}	Collector Cutoff Current	$V_{CB}=V_{(BR)CBO}; I_E=0$		0.5	mA	
h_{FE}	DC Current Gain	$I_C=1\text{A}; V_{CE}=5\text{V}$	15	120		

◆ h_{FE} Classifications

R	O	Y	G	B
15-25	25-40	40-55	55-80	80-120

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