

DESCRIPTION

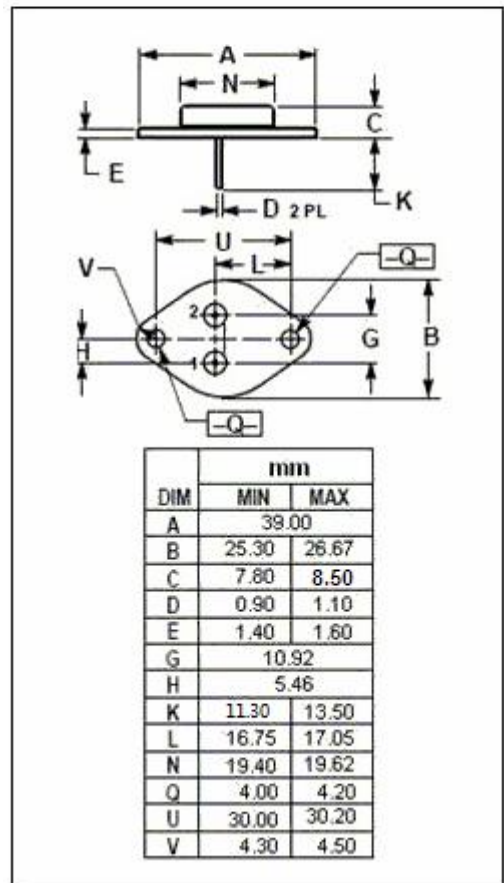
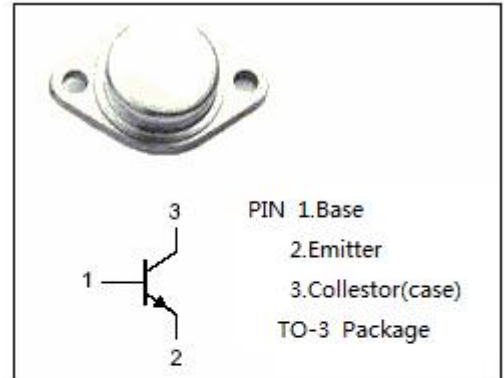
- High Breakdown Voltage-
: $V_{CBO} = 1500V$ (Min)
- High Switching Speed
- Low Collector Saturation Voltage-
: $V_{CE(sat)} = 5.0V$ (Max.) @ $I_C = 6A$

APPLICATIONS

- Designed for color TV horizontal output applications.

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	1500	V
V_{CEO}	Collector-Emitter Voltage	600	V
V_{EBO}	Emitter-Base Voltage	5	V
I_C	Collector Current- Continuous	7	A
I_E	Emitter Current- Continuous	7	A
P_C	Collector Power Dissipation @ $T_c \leq 90^\circ C$	50	W
T_J	Junction Temperature	150	$^\circ C$
T_{stg}	Storage Temperature Range	-55~150	$^\circ C$



Silicon NPN Power Transistor**2SD822****ELECTRICAL CHARACTERISTICS** **$T_C=25^{\circ}\text{C}$ unless otherwise specified**

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C = 6\text{A}; I_B = 1.2\text{A}$		3.0	5.0	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	$I_C = 6\text{A}; I_B = 1.2\text{A}$			1.5	V
I_{CBO}	Collector Cutoff Current	$V_{CB} = 500\text{V}; I_E = 0$			10	μA
I_{EBO}	Emitter Cutoff Current	$V_{EB} = 5\text{V}; I_C = 0$			1.0	mA
h_{FE}	DC Current Gain	$I_C = 1\text{A}; V_{CE} = 5\text{V}$	8	20		
C_{OB}	Output Capacitance	$I_E = 0; V_{CB} = 10\text{V}; f_{test} = 1.0\text{MHz}$		165		pF
f_T	Current-Gain—Bandwidth Product	$I_C = 0.1\text{A}; V_{CE} = 10\text{V}$		3		MHz
t_f	Fall Time	$I_C = 6\text{A}, I_{Bend} = 1.2\text{A}$		0.5	1.0	μs