

SPTECH Silicon NPN Power Transistor**2SC1942****DESCRIPTION**

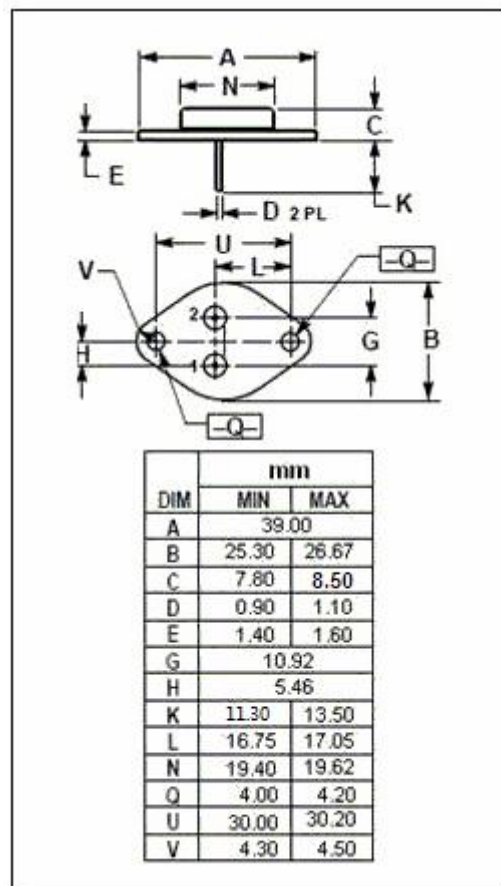
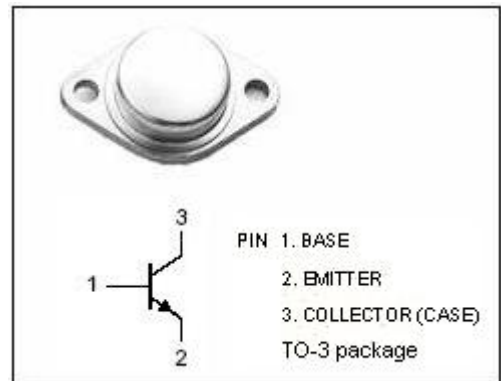
- High Voltage- $V_{CEX} = 1500V(\text{Min.})$
- Collector Current- $I_C = 3.0A$

APPLICATIONS

- Designed for use in large screen color deflection circuits .

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{CEX}	Collector-Emitter Voltage	1500	V
V_{CEO}	Collector-Emitter Voltage	800	V
V_{EBO}	Emitter-Base Voltage	6	V
I_C	Collector Current-Continuous	3.0	A
I_{CM}	Collector Current-Peak	6	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	-45~150	$^\circ\text{C}$



SPTECH Silicon NPN Power Transistor**2SC1942****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	$I_C=10\text{mA}; R_{BE}=\infty$	800			V
$V_{(BR)EBO}$	Emitter -Base Breakdown Voltage	$I_E=10\text{mA}; I_C=0$	6			V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C=2.5\text{A}; I_B=0.8\text{A}$			5	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	$I_C=2.5\text{A}; I_B=0.8\text{A}$			1.5	V
I_{CEX}	Collector Cutoff Current	$V_{CE}=1500\text{V}; V_{BE}=1.5\text{V}$			0.5	mA
I_{CBO}	Collector Cutoff Current	$V_{CB}=600\text{V}; I_E=0$			10	μA
t_f	Fall Time	$I_C=2.75\text{A}; I_B=0.6\text{A}; I_B=1.3\text{A}; L_B=0$			1.0	μs