

isc Silicon NPN Power Transistor
S2818A
DESCRIPTION

- High Voltage- $V_{CBO} = 1500V(\text{Min.})$
- Collector Current- $I_C = 7.5A$
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

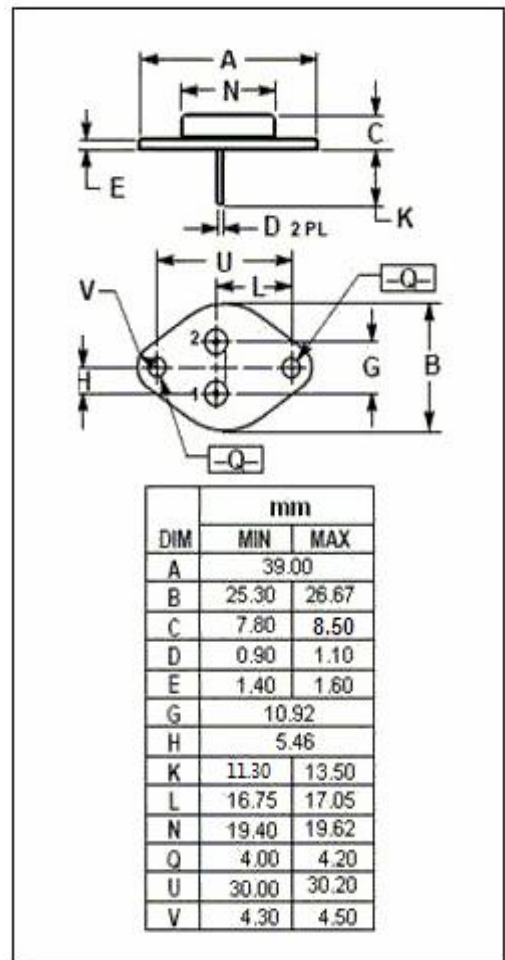
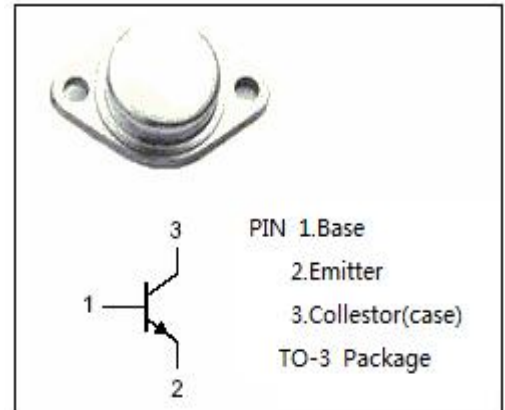
- Color TV Horizontal output applications

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Emitter Voltage	1500	V
V_{CEO}	Collector-Emitter Voltage	700	V
V_{EBO}	Emitter-Base Voltage	5	V
I_C	Collector Current	5	A
I_{CM}	Collector Current-Peak	7.5	A
I_{BM}	Base Current-Peak	4	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	-55~150	$^\circ\text{C}$

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j-c}$	Thermal Resistance, Junction to Case	2.5	$^\circ\text{C/W}$



isc Silicon NPN Power Transistor**S2818A****ELECTRICAL CHARACTERISTICS** $T_C=25^{\circ}\text{C}$ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V_{CB0}	Collector-Emitter Sustaining Voltage	$I_C= 1\text{mA}; I_B= 0$	1500			V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C= 4.5\text{A}; I_B= 2\text{A}$			1.0	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	$I_C= 4.5\text{A}; I_B= 2\text{A}$			1.5	V
I_{E0}	Emitter Cutoff Current	$V_{EB}= 5.0\text{V}; I_C= 0$			200	mA
I_{C0}	Collector Cutoff Base	$V_{CB}= 1500\text{V}; V_{CE}= 0$			1	mA
h_{FE1}	DC Current Gain	$I_C= 1\text{A}; V_{CE}= 5\text{V}$	10		40	
h_{FE2}	DC Current Gain	$I_C= 4.5\text{A}; V_{CE}= 5\text{V}$	2.25			

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