

isc Silicon NPN Power Transistor

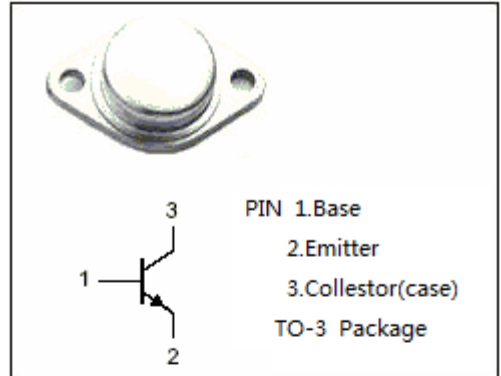
2SD807

DESCRIPTION

- High Breakdown Voltage-
: $V_{CBO} = 1500V$ (Min)
- Low collector saturation voltage
- With TO-3 Package
- Minimum Lot-to-Lot variations for robust device performance and reliable operation.

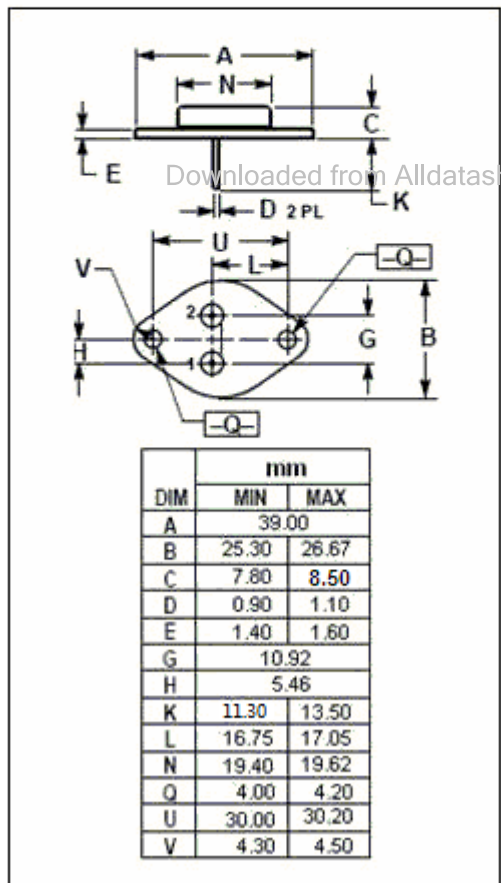
APPLICATIONS

- Designed for high voltage power switching TV horizontal deflection 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	800	V
V_{EBO}	Emitter-Base Voltage	7	V
I_C	Collector Current-Continuous	5	A
I_{CM}	Collector Current-Peak	8	A
P_C	Collector Power Dissipation @ $T_C=25^{\circ}C$	50	W
T_J	Junction Temperature	150	$^{\circ}C$
T_{stg}	Storage Temperature Range	-65-150	$^{\circ}C$



isc Silicon NPN Power Transistor**2SD807****ELECTRICAL CHARACTERISTICS** $T_C=25^\circ\text{C}$ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
$V_{(BR)EBO}$	Emitter-Base Breakdown Voltage	$I_E=1\text{mA}; I_C=0$	6		V
$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage	$I_C=10\text{mA}; I_B=0$	800		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_{CBO}	Collector Cutoff Current	$V_{CB}=1500\text{V}; I_B=0$		0.5	mA
I_{EBO}	Emitter Cutoff Current	$V_{EB}=6\text{V}; I_C=0$		0.1	mA
h_{FE}	DC Current Gain	$I_C=1\text{A}; V_{CE}=5\text{V}$	10	36	

Switching times

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t_{on}	Turn-on Time			1.0	μs
t_{stg}	Storage Time	$I_C=4.5\text{A}, I_{B1}=I_{B2}=2\text{A}$		8.0	μs
t_f	Fall Time			2.5	μs