

Silicon NPN Power Transistor

2SD568

DESCRIPTION

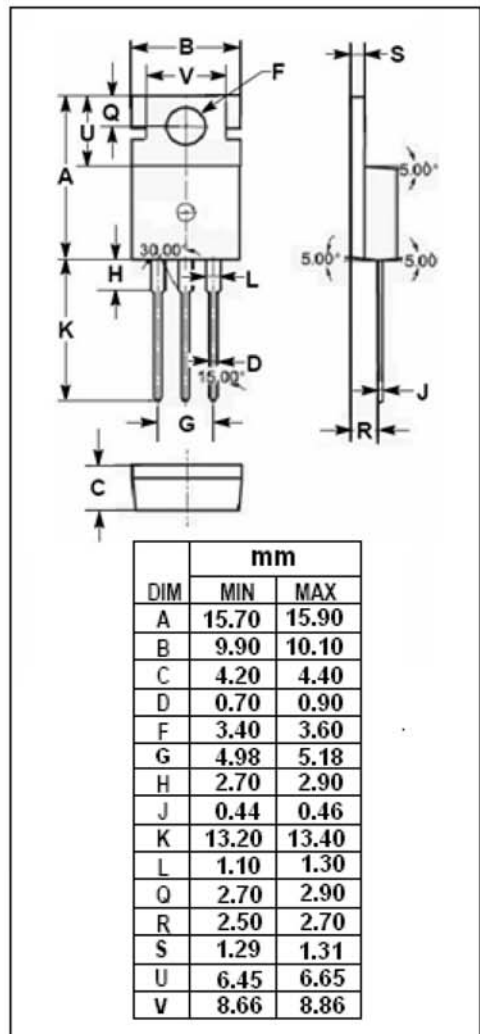
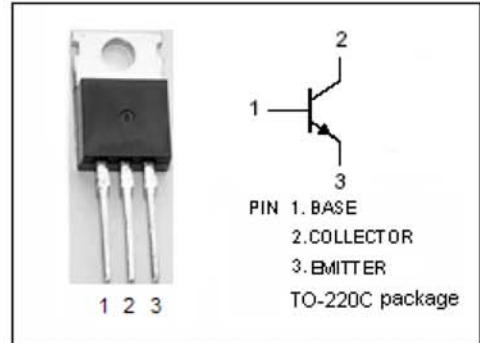
- High Collector Current: $I_C = 7A$
- Low Collector Saturation Voltage
: $V_{CE(sat)} = 0.5V(\text{Max}) @ I_C = 5A$
- Complement to Type 2SB707

APPLICATIONS

- Designed for low-frequency power amplifiers and low-speed switching applications.

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	80	V
V_{CEO}	Collector-Emitter Voltage	60	V
V_{EBO}	Emitter-Base Voltage	7	V
I_C	Collector Current-Continuous	7	A
I_{CM}	Collector Current-Peak	15	A
I_B	Base Current-Continuous	3.5	A
P_C	Total Power Dissipation @ $T_C=25^\circ\text{C}$	40	W
	Total Power Dissipation @ $T_a=25^\circ\text{C}$	2	
T_J	Junction Temperature	150	$^\circ\text{C}$
T_{stg}	Storage Temperature Range	-55~150	$^\circ\text{C}$



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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	$I_C=10\text{mA}; I_B=0$	60			V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C=5\text{A}; I_B=0.5\text{A}$			0.5	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	$I_C=5\text{A}; I_B=0.5\text{A}$			1.5	V
I_{CBO}	Collector Cutoff Current	$V_{CB}=60\text{V}; I_E=0$			10	μA
I_{EBO}	Emitter Cutoff Current	$V_{EB}=5\text{V}; I_C=0$			10	μA
h_{FE-1}	DC Current Gain	$I_C=3\text{A}; V_{CE}=1\text{V}$	40		200	
h_{FE-2}	DC Current Gain	$I_C=5\text{A}; V_{CE}=1\text{V}$	20			

◆ h_{FE-1} Classifications

M	L	K
40-80	60-120	100-200