

isc Silicon PNP Power Transistor

2SA1308

DESCRIPTION

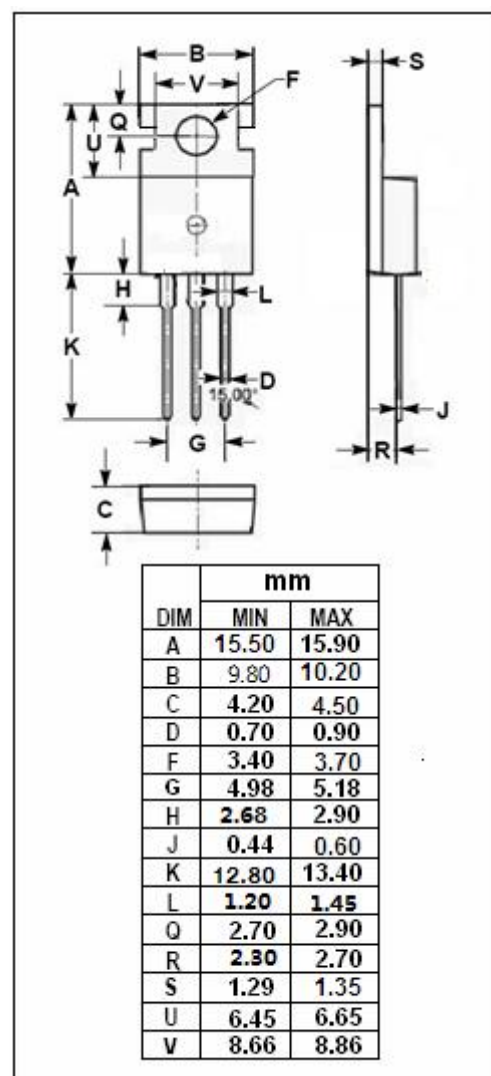
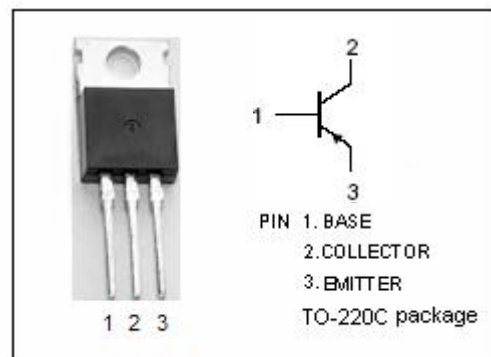
- Low Collector Saturation Voltage
- Fast Switching Speed
- Complement to Type 2SC3308
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- High current switching applications

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	-100	V
V_{CEO}	Collector-Emitter Voltage	-80	V
V_{EBO}	Emitter-Base Voltage	-7.0	V
I_C	Collector Current-Continuous	-5	A
I_{CM}	Collector Current-Peak	-8	A
P_C	Collector Power Dissipation @ $T_a=25^{\circ}\text{C}$	1.0	W
	Collector Power Dissipation @ $T_c=25^{\circ}\text{C}$	30	
T_J	Junction Temperature	150	$^{\circ}\text{C}$
T_{stg}	Storage Temperature Range	-55~150	$^{\circ}\text{C}$



isc Silicon PNP Power Transistor**2SA1308****ELECTRICAL CHARACTERISTICS** $T_c=25^{\circ}\text{C}$ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C = -3.0\text{A}; I_B = -0.15\text{A}$		-0.4	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	$I_C = -3.0\text{A}; I_B = -0.15\text{A}$		-1.2	V
I_{CBO}	Collector Cutoff Current	$V_{CB} = -100\text{V}; I_E = 0$		-1	μA
I_{EBO}	Emitter Cutoff Current	$V_{EB} = -7\text{V}; I_C = 0$		-1	μA
h_{FE-1}	DC Current Gain	$I_C = -1.0\text{A}; V_{CE} = -1.0\text{V}$	70	240	
h_{FE-2}	DC Current Gain	$I_C = -3.0\text{A}; V_{CE} = -1.0\text{V}$	40		

Switching times

t_{on}	Turn-on Time	$I_C = -5.0\text{A}, R_L = 10\Omega, I_{B1} = -I_{B2} = -0.15\text{A}, V_{CC} \approx -30\text{V}$		0.2	μs
t_{stg}	Storage Time			1.0	μs
t_f	Fall Time			0.1	μs

◆ **h_{FE-1} Classifications**

O	Y
70-140	120-240

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