

isc Silicon NPN Power Transistor
2SD325
DESCRIPTION

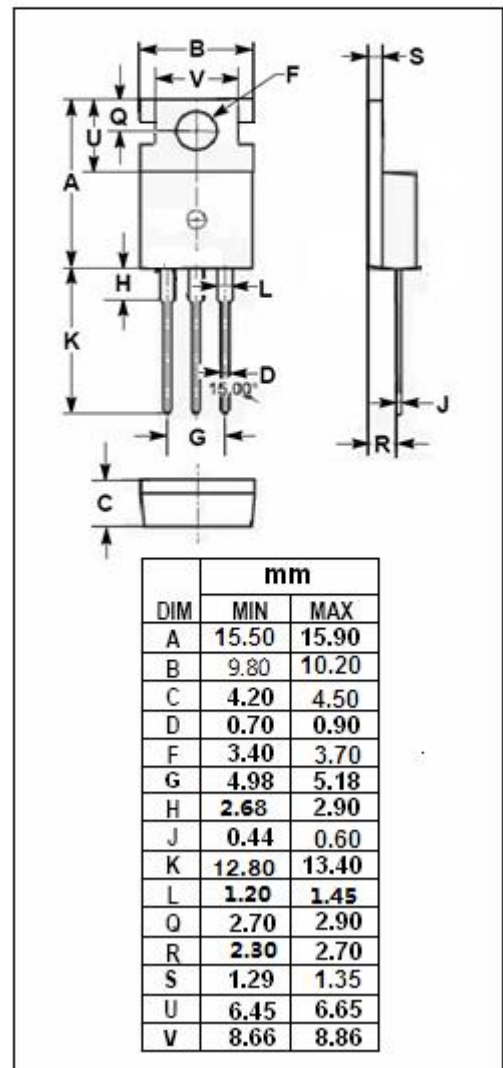
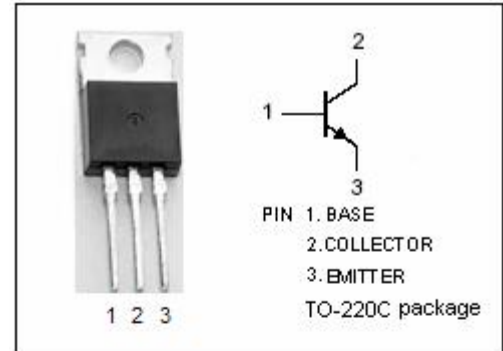
- Collector-Emitter Breakdown Voltage-
: $V_{(BR)CEO} = 35V(\text{Min})$
- Low Collector-Emitter Saturation Voltage-
: $V_{CE(sat)} = 1.0V(\text{Max}) @ I_C = 1.5A$
- Complement to Type 2SB511
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Designed for low frequency power amplifier applications.
- Recommended for 5 watts AF power amplifier output use.

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	35	V
V_{CEO}	Collector-Emitter Voltage	35	V
V_{EBO}	Emitter-Base Voltage	5	V
I_C	Collector Current-Continuous	1.5	A
I_{CM}	Collector Current-Peak	3.0	A
P_C	Collector Power Dissipation @ $T_a = 25^\circ\text{C}$	1.75	W
	Collector Power Dissipation @ $T_c = 25^\circ\text{C}$	10	
T_J	Junction Temperature	150	$^\circ\text{C}$
T_{stg}	Storage Temperature Range	-55~150	$^\circ\text{C}$



isc Silicon NPN Power Transistor**2SD325****ELECTRICAL CHARACTERISTICS**T_c=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{CE(sat)}	Collector-Emitter Saturation Voltage	I _C = 1.5A; I _B = 0.15A			1.0	V
V _{BE(on)}	Base-Emitter On Voltage	I _C = 1A; V _{CE} = 5V			1.5	V
I _{CBO}	Collector Cutoff Current	V _{CB} = 20V; I _E = 0			100	μA
I _{EBO}	Emitter Cutoff Current	V _{EB} = 4V; I _C = 0			1.0	mA
h _{FE-1}	DC Current Gain	I _C = 1A ; V _{CE} = 2V	40		320	
h _{FE-2}	DC Current Gain	I _C = 0.1A ; V _{CE} = 2V	35			
f _T	Current-Gain—Bandwidth Product	I _C = 0.5A; V _{CE} = 5V		8		MHz

◆ **h_{FE-1} Classifications**

C	D	E	F
40-80	60-120	100-200	160-320

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