

isc Silicon NPN Power Transistor
2SD1265
DESCRIPTION

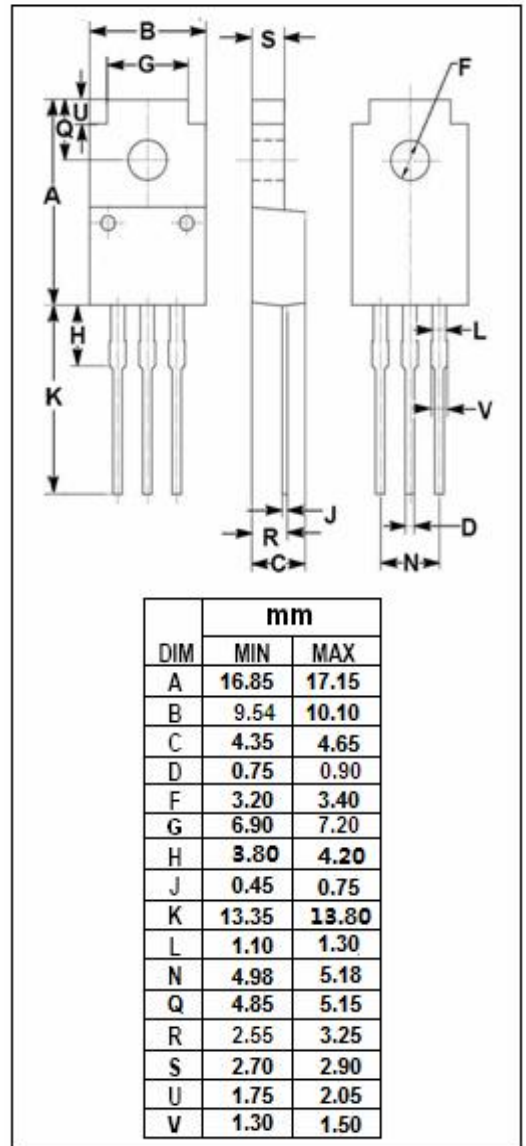
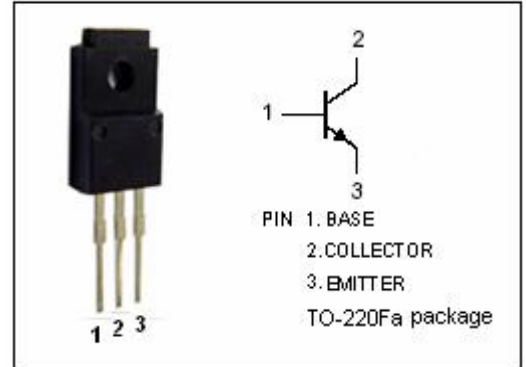
- Low Collector Saturation Voltage
: $V_{CE(sat)} = 1.0V(\text{Max}) @ I_C = 2A$
- Collector-Emitter Sustaining Voltage-
: $V_{CEO(SUS)} = 60V (\text{Min})$
- Wide Area of Safe Operation
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Designed for power amplification.

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	60	V
V_{CEO}	Collector-Emitter Voltage	60	V
V_{EBO}	Emitter-Base Voltage	8	V
I_C	Collector Current-Continuous	4	A
I_{CM}	Collector Current-Peak	6	A
I_B	Base Current-Continuous	1	A
P_C	Collector Power Dissipation @ $T_C = 25^\circ\text{C}$	30	W
	Collector 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°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{CEO(SUS)}	Collector-Emitter Sustaining Voltage	I _c = 50mA; L= 25mH	60			V
V _{CE(sat)}	Collector-Emitter Saturation Voltage	I _c = 2A; I _B = 0.4A			1.0	V
V _{BE(on)}	Base-Emitter On Voltage	I _c = 1A; V _{CE} = 3V			1.2	V
I _{CEO}	Collector Cutoff Current	V _{CE} = 20V; I _B = 0			30	μA
I _{EBO}	Emitter Cutoff Current	V _{EB} = 8V; I _c = 0			1.0	mA
h _{FE-1}	DC Current Gain	I _c = 0.1A; V _{CE} = 3V	40			
h _{FE-2}	DC Current Gain	I _c = 1A; V _{CE} = 3V	30		160	

◆ h_{FE-1} classifications

Q	P	P
30-60	50-100	80-160

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