

isc Silicon NPN Power Transistor
2SD386
DESCRIPTION

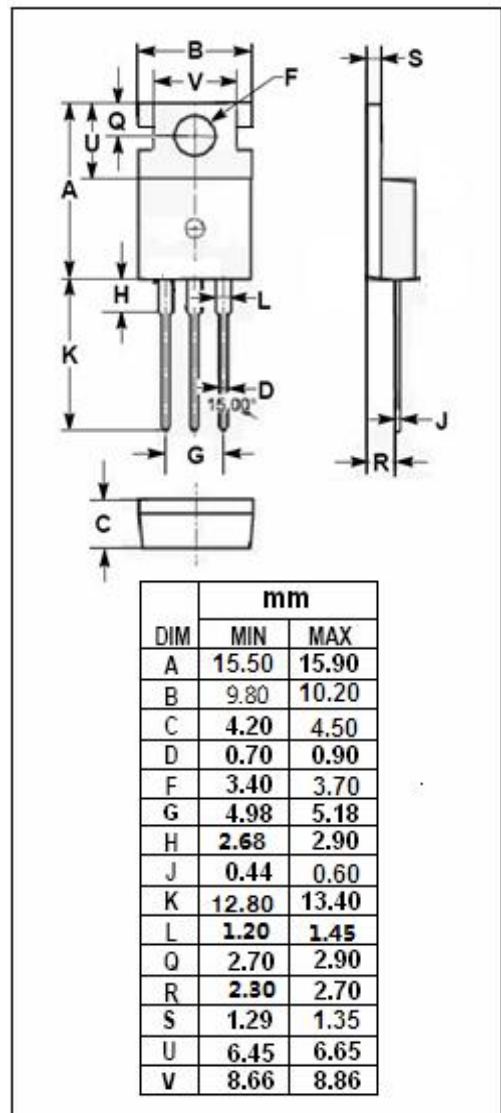
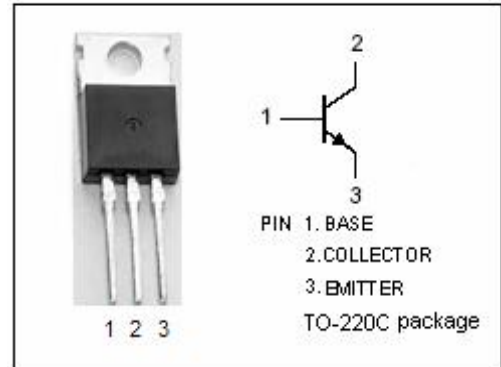
- Collector-Emitter Breakdown Voltage-
: $V_{(BR)CEO} = 120V(\text{Min})$
- Low Collector-Emitter Saturation Voltage-
: $V_{CE(sat)} = 1.0V(\text{Max}) @ I_C = 1.0A$
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Designed for TV vertical deflection output applications.

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	200	V
V_{CEO}	Collector-Emitter Voltage	120	V
V_{EBO}	Emitter-Base Voltage	6	V
I_C	Collector Current-Continuous	3	A
I_{CM}	Collector Current-Peak	10	A
P_C	Collector Power Dissipation @ $T_a = 25^\circ\text{C}$	1.75	W
	Collector Power Dissipation @ $T_c = 25^\circ\text{C}$	25	
T_J	Junction Temperature	150	$^\circ\text{C}$
T_{stg}	Storage Temperature Range	-40~150	$^\circ\text{C}$



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ELECTRICAL CHARACTERISTICS
T_c=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{(BR)CEO}	Collector-Emitter Breakdown Voltage	I _C = 10mA; I _B = 0	120			V
V _{CE(sat)}	Collector-Emitter Saturation Voltage	I _C = 1A; I _B = 0.1A			1.0	V
V _{BE(sat)}	Base-Emitter Saturation Voltage	I _C = 1A; I _B = 0.1A			1.8	V
I _{CBO}	Collector Cutoff Current	V _{CB} = 180V; I _E = 0			1.0	mA
I _{EBO}	Emitter Cutoff Current	V _{EB} = 5V; I _C = 0			5.0	mA
h _{FE}	DC Current Gain	I _C = 0.5A; V _{CE} = 2V	40		320	
f _T	Current-Gain—Bandwidth Product	I _C = 0.5A; V _{CE} = 5V		8		MHz

◆ h_{FE} Classifications

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

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