

isc Silicon PNP Power Transistor
2SA1387
DESCRIPTION

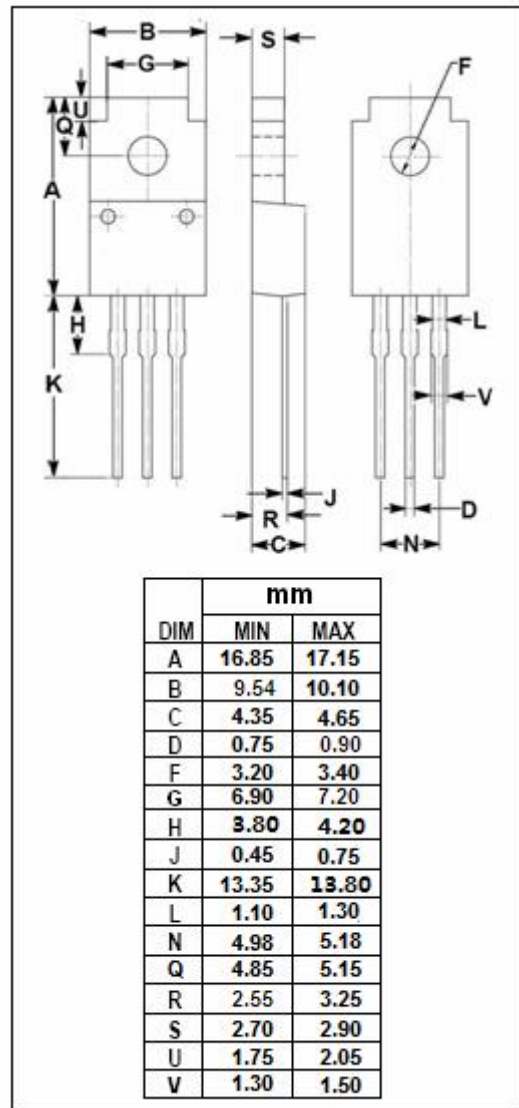
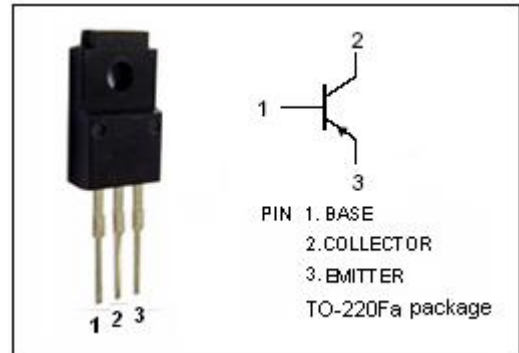
- High DC Current Gain-
: $h_{FE} = 150(\text{Min.}) @ I_C = -1\text{A}$
- High Switching Speed
- Low Collector Saturation Voltage-
: $V_{CE(\text{sat})} = -0.4\text{V}(\text{Max}) @ I_C = -3\text{A}$
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Designed for high current switching applications.

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	-50	V
V_{EBO}	Emitter-Base Voltage	-7	V
I_C	Collector Current-Continuous	-5	A
I_B	Base Current-Continuous	-1	A
P_C	Collector Power Dissipation @ $T_a = 25^\circ\text{C}$	2	W
	Collector Power Dissipation @ $T_c = 25^\circ\text{C}$	20	
T_J	Junction Temperature	150	$^\circ\text{C}$
T_{stg}	Storage Temperature	-55~150	$^\circ\text{C}$



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ELECTRICAL CHARACTERISTICS

T_j=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	-50			V
V _{CE(sat)}	Collector-Emitter Saturation Voltage	I _C = -3A; I _B = -75mA			-0.4	V
V _{BE(sat)}	Base-Emitter Saturation Voltage	I _C = -3A; I _B = -75mA			-1.2	V
I _{CBO}	Collector Cutoff Current	V _{CB} = -50V; I _E = 0			-1	μA
I _{EBO}	Emitter Cutoff Current	V _{EB} = -7V; I _C = 0			-1	μA
h _{FE-1}	DC Current Gain	I _C = -1A; V _{CE} = -1V	150		400	
h _{FE-2}	DC Current Gain	I _C = -3A; V _{CE} = -1V	70			
f _T	Current-Gain—Bandwidth Product	I _E = 1A; V _{CE} = -4V		80		MHz
C _{OB}	Output Capacitance	I _E = 0; V _{CB} = -10V; f _{test} = 1MHz		200		pF

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