

isc Silicon PNP Power Transistor
2SA2222SG
DESCRIPTION

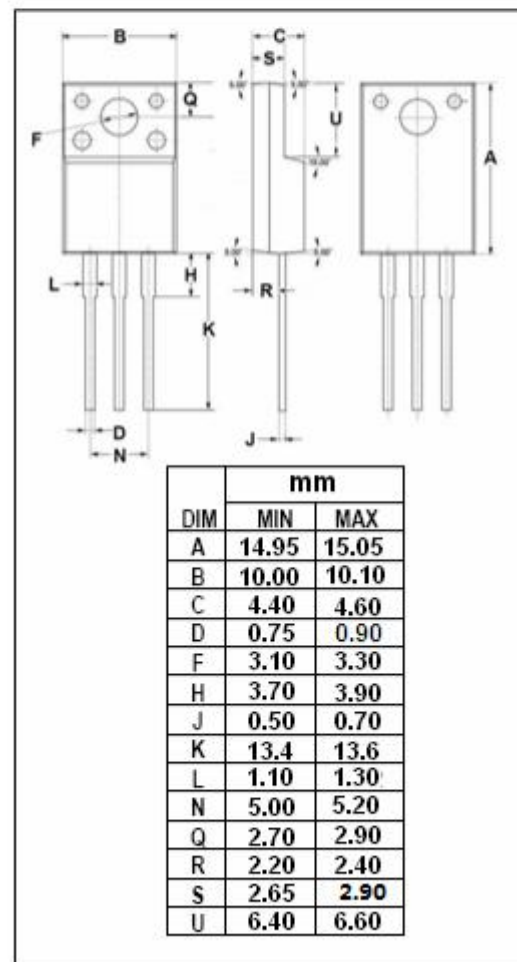
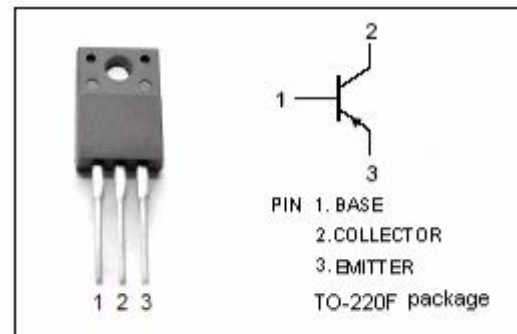
- Large current capacitance
- High-speed switching
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- relay drivers, lamp drivers, motor drivers

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	-50	V
V_{CEO}	Collector-Emitter Voltage	-50	V
V_{EBO}	Emitter-Base Voltage	-6	V
I_C	Collector Current-Continuous	-10	A
I_{CM}	Collector Current-Peak	-13	A
P_C	Collector Power Dissipation @ $T_c=25^\circ\text{C}$	25	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 _{CE(sat)}	Collector-Emitter Saturation Voltage	I _C = -6A; I _B = -300mA			-0.5	V
V _{BE(sat)}	Base-Emitter Saturation Voltage	I _C = -6A; I _B = -300mA			-1.2	V
V _{(BR)CEO}	Collector-Emitter Breakdown Voltage	I _C = -1mA; I _B = 0	-50			V
V _{(BR)EBO}	Emitter-Base Breakdown Voltage	I _E = -100uA; I _C = 0	-6			V
I _{CBO}	Collector Cutoff Current	V _{CB} = -40V; I _E = 0			-10	μ A
I _{EBO}	Emitter Cutoff Current	V _{EB} = -4V; I _C = 0			-10	μ A
h _{FE}	DC Current Gain	I _C = -0.27A; V _{CE} = -2V	150		450	
C _{OB}	Output Capacitance	I _E = 0; V _{CB} = -10V; f= 1.0MHz		115		pF
f _T	Current-Gain—Bandwidth Product	I _C = -1A; V _{CE} = -10V		230		MHz

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