

isc Silicon PNP Power Transistor

2SA2222SG

DESCRIPTION

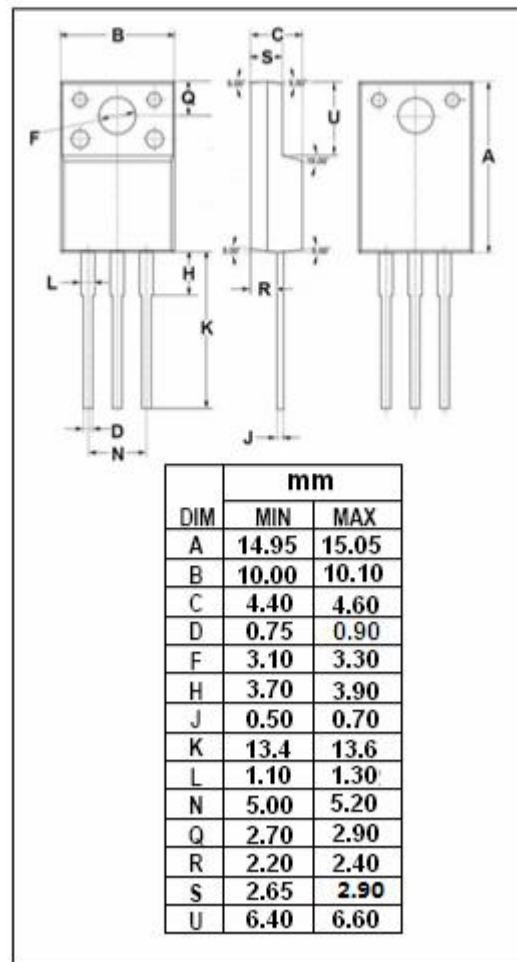
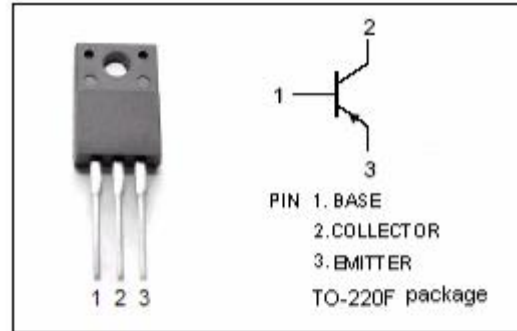
- Large current capacitance
- High-speed switching
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- relay drivers, lamp drivers, motor drivers

ABSOLUTE MAXIMUM RATINGS(T_a=25°C)

SYMBOL	PARAMETER	VALUE	UNIT
V _{CB0}	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°C	25	W
	Collector Power Dissipation @ T _a =25°C	2	
T _J	Junction Temperature	150	°C
T _{stg}	Storage Temperature Range	-55~150	°C



isc Silicon PNP Power Transistor**2SA2222SG****ELECTRICAL CHARACTERISTICS** $T_c=25^{\circ}\text{C}$ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C = -6\text{A}; I_B = -300\text{mA}$			-0.5	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	$I_C = -6\text{A}; I_B = -300\text{mA}$			-1.2	V
$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage	$I_C = -1\text{mA}; I_B = 0$	-50			V
$V_{(BR)EBO}$	Emitter-Base Breakdown Voltage	$I_E = -100\mu\text{A}; I_C = 0$	-6			V
I_{CBO}	Collector Cutoff Current	$V_{CB} = -40\text{V}; I_E = 0$			-10	μA
I_{EBO}	Emitter Cutoff Current	$V_{EB} = -4\text{V}; I_C = 0$			-10	μA
h_{FE}	DC Current Gain	$I_C = -0.27\text{A}; V_{CE} = -2\text{V}$	150		450	
C_{OB}	Output Capacitance	$I_E = 0; V_{CB} = -10\text{V}; f = 1.0\text{MHz}$		115		pF
f_T	Current-Gain—Bandwidth Product	$I_C = -1\text{A}; V_{CE} = -10\text{V}$		230		MHz