

isc Silicon PNP Power Transistor

2SA839

DESCRIPTION

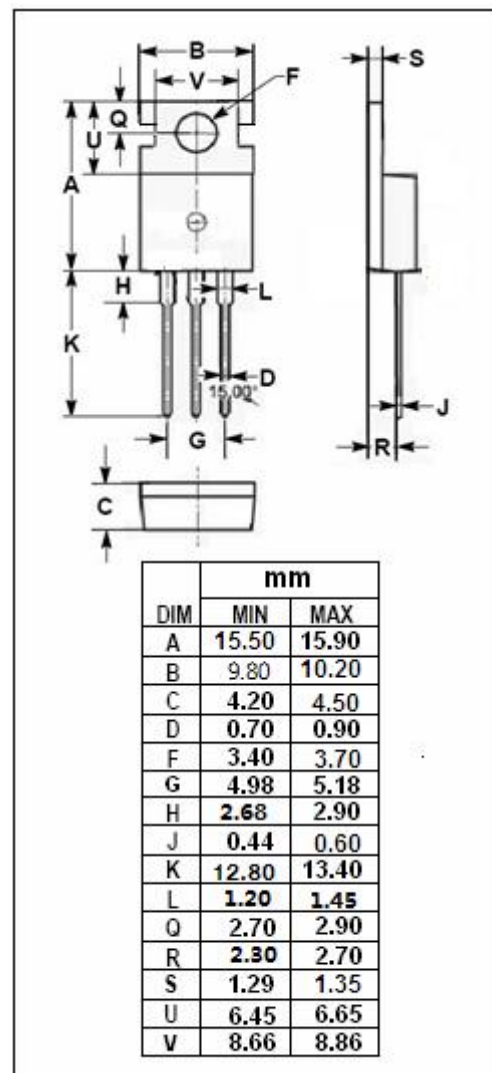
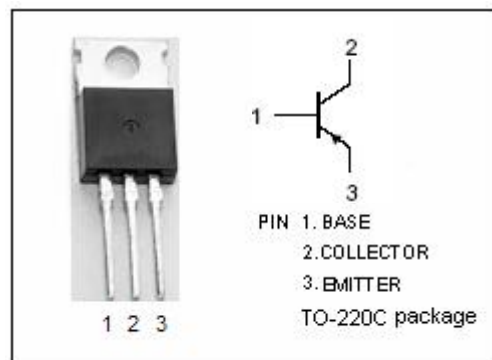
- Collector-Emitter Breakdown Voltage
: $V_{(BR)CEO} = -150V(\text{Min})$
- DC Current Gain
: $h_{FE} = 40-240 @ I_C = -0.5A$
- Complement to Type 2SC1669
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Audio power amplifier applications.
- Driver stage amplifier applications.

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	-150	V
V_{CEO}	Collector-Emitter Voltage	-150	V
V_{EBO}	Emitter-Base Voltage	-5	V
I_C	Collector Current-Continuous	-1.5	A
I_E	Emitter Current-Continuous	1.5	A
P_C	Total Power Dissipation @ $T_C=25^\circ\text{C}$	25	W
T_J	Junction Temperature	150	$^\circ\text{C}$
T_{stg}	Storage Temperature Range	-55~150	$^\circ\text{C}$



isc Silicon PNP Power Transistor**2SA839****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	-150			V
V _{(BR)EBO}	Emitter-Base Breakdown Voltage	I _E = -1mA; I _C = 0	-5			V
V _{CE(sat)}	Collector-Emitter Saturation Voltage	I _C = -0.5A; I _B = -50mA			-1.5	V
V _{BE(on)}	Base-Emitter On Voltage	I _C = -0.5A; V _{CE} = -10V			-1.0	V
I _{CBO}	Collector Cutoff Current	V _{CB} = -100V; I _E = 0			-20	μA
I _{EBO}	Emitter Cutoff Current	V _{EB} = -5V; I _C = 0			-10	μA
h _{FE-1}	DC Current Gain	I _C = -0.5A; V _{CE} = -10V	40		240	
h _{FE-2}	DC Current Gain	I _C = -1A; V _{CE} = -10V	20			
C _{OB}	Output Capacitance	I _E = 0; V _{CB} = -10V; f= 1MHz		100		pF
f _T	Current-Gain—Bandwidth Product	I _C = -0.5A; V _{CE} = -10V		6		MHz

◆ h_{FE-1} Classifications

R	O	Y
40-80	70-140	120-240

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