

isc Silicon PNP Power Transistor

2SA490

DESCRIPTION

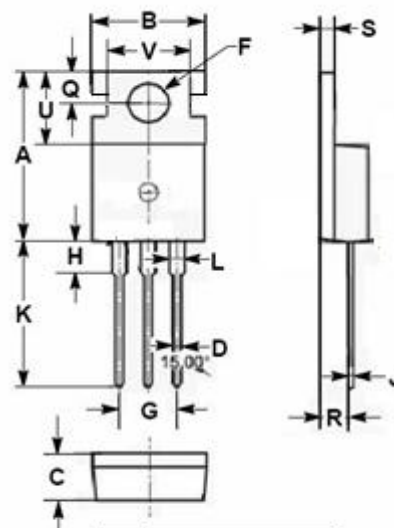
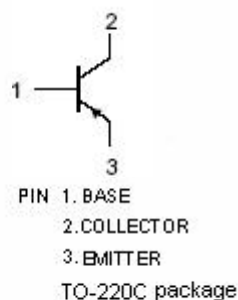
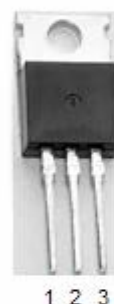
- High Collector Current:: $I_C = -3A$
- Collector-Emitter Breakdown Voltage
: $V_{(BR)CEO} = -40V(\text{Min})$
- Complement to Type 2SC790
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- 10 Watts output applications
- Power amplifier applications.

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	-40	V
V_{EBO}	Emitter-Base Voltage	-5	V
I_C	Collector Current-Continuous	-3	A
I_E	Emitter Current-Continuous	3	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	$^\circ\text{C}$



DIM	mm	
	MIN	MAX
A	15.50	15.90
B	9.80	10.20
C	4.20	4.50
D	0.70	0.90
F	3.40	3.70
G	4.98	5.18
H	2.68	2.90
J	0.44	0.60
K	12.80	13.40
L	1.20	1.45
Q	2.70	2.90
R	2.30	2.70
S	1.29	1.35
U	6.45	6.65
V	8.66	8.86

isc Silicon PNP Power Transistor**2SA490****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 = -50mA ; I _B = 0	-40			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 = -2A; I _B = -0.2A			-1.2	V
V _{BE(on)}	Base-Emitter On Voltage	I _C = -2A ; V _{CE} = -2V			-1.8	V
I _{CBO}	Collector Cutoff Current	V _{CB} = -30V ; I _E = 0			-10	μ A
I _{EBO}	Emitter Cutoff Current	V _{EB} = -5V; I _C = 0			-100	μ A
h _{FE-1}	DC Current Gain	I _C = -0.5A ; V _{CE} = -2V	40		240	
h _{FE-2}	DC Current Gain	I _C = -2A ; V _{CE} = -2V	13			
f _T	Current-Gain—Bandwidth Product	I _C = -0.5A ; V _{CE} = -2V	3			MHz
C _{OB}	Output Capacitance	I _E = 0; V _{CB} = -10V; f _{test} = 1MHz		150		pF

◆ h_{FE-1} Classifications

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

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