

isc Silicon NPN Power Transistor

2SD1499

DESCRIPTION

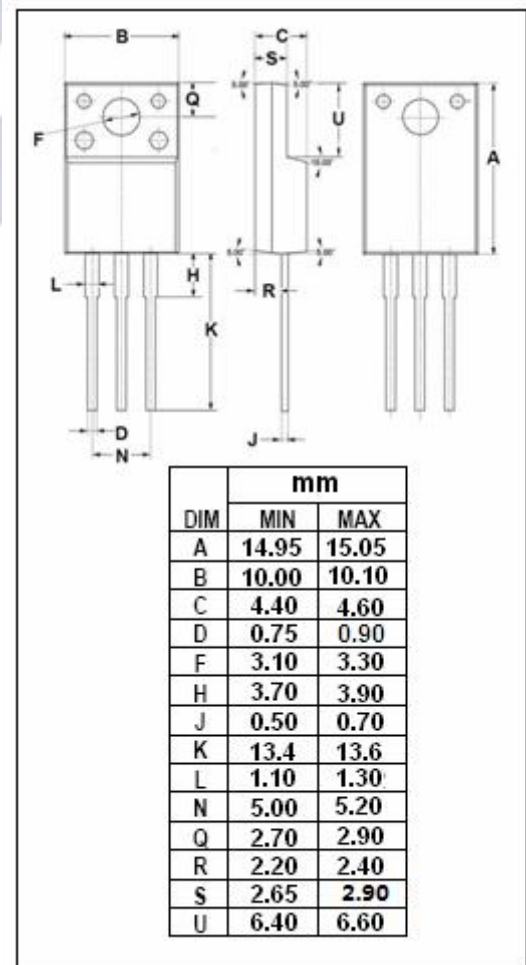
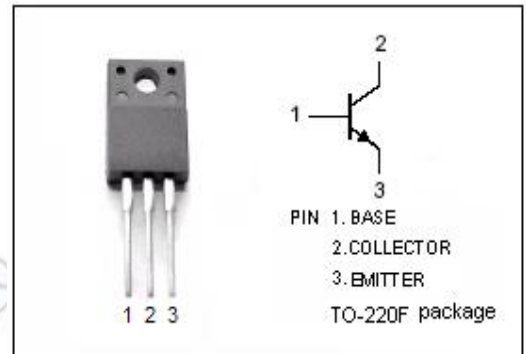
- Collector-Emitter Breakdown Voltage-
: $V_{(BR)CEO} = 100V$ (Min)
- Wide Area of Safe Operation
- Complement to Type 2SB1063
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Designed for high power amplifications.

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	100	V
V_{CEO}	Collector-Emitter Voltage	100	V
V_{EBO}	Emitter-Base Voltage	5	V
I_C	Collector Current-Continuous	5	A
I_{CM}	Collector Current-Peak	8	A
P_C	Collector Power Dissipation @ $T_c=25^{\circ}C$	40	W
	Collector Power Dissipation @ $T_a=25^{\circ}C$	2	
T_J	Junction Temperature	150	$^{\circ}C$
T_{stg}	Storage Temperature Range	-55~150	$^{\circ}C$



isc Silicon NPN Power Transistor**2SD1499****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	100			V
V _{CE(sat)}	Collector-Emitter Saturation Voltage	I _C = 3A; I _B = 0.3A			2.0	V
V _{BE(on)}	Base-Emitter On Voltage	I _C = 3A ; V _{CE} = 5V			1.8	V
I _{CBO}	Collector Cutoff Current	V _{CB} = 100V; I _E = 0			50	μ A
I _{EBO}	Emitter Cutoff Current	V _{EB} = 3V; I _C = 0			50	μ A
h _{FE-1}	DC Current Gain	I _C = 20mA ; V _{CE} = 5V	20			
h _{FE-2}	DC Current Gain	I _C = 1A ; V _{CE} = 5V	60		200	
h _{FE-3}	DC Current Gain	I _C = 3A ; V _{CE} = 5V	20			
f _T	Current-Gain—Bandwidth Product	I _C = 0.5A; V _{CE} = 5V; f _{test} = 1.0MHz		20		MHz
C _{OB}	Output Capacitance	I _E =0 ; V _{CB} = 10V; f _{test} = 1.0MHz		90		pF

◆ **h_{FE-2} classifications**

Q	P
60-120	100-200

