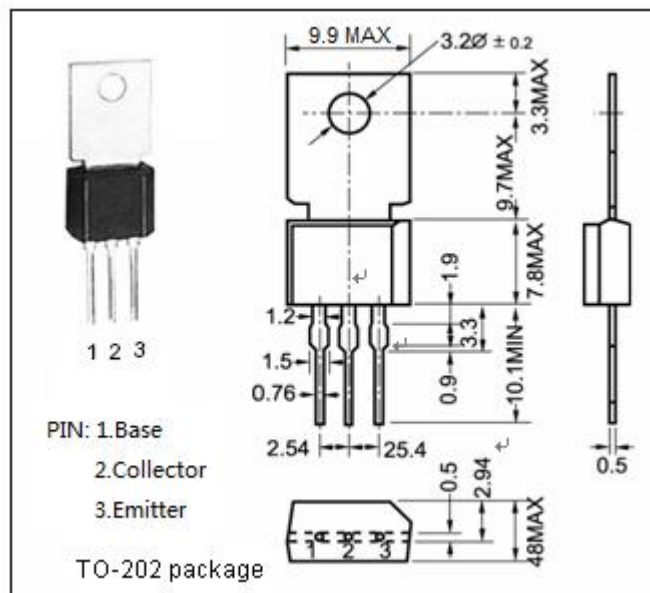


isc Silicon NPN Power Transistor
2SC1848
DESCRIPTION

- Silicon NPN epitaxial planar
- High voltage
- Complement to Type 2SA887
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Designed for medium power amplifier


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

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	70	V
V_{CEO}	Collector-Emitter Voltage	50	V
V_{EBO}	Emitter-Base Voltage	5	V
I_C	Collector Current-Continuous	2	A
P_C	Total Power Dissipation @ $T_a=25^\circ\text{C}$	1.2	w
	Total Power Dissipation @ $T_C=25^\circ\text{C}$	10	W
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)-1}	Collector-Emitter Saturation Voltage	I _C = 1A; I _B = 0.1A			1.0	V
V _{CE(sat)-2}	Collector-Emitter Saturation Voltage	I _C = 2A; I _B = 0.2A			1.5	V
I _{CBO}	Collector Cutoff Current	V _{CB} = 40V; I _E = 0			1.0	μ A
I _{EBO}	Emitter Cutoff Current	V _{EB} =5V; I _C = 0			10	μ A
h _{FE-1}	DC Current Gain	I _C = 0.1A ; V _{CE} = 5V	30			
h _{FE-2}	DC Current Gain	I _C = 1.0A ; V _{CE} = 5V	50		220	
f _T	Current-Gain—Bandwidth Product	I _C = 500mA; V _{CE} = 5V		150		MHz

◆ h_{FE-2} Classifications

P	Q	R
50-100	80-160	120-220

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