

2SD1912



2010A

NPN Epitaxial Planar
Silicon Transistor

T-33-09

Low Frequency Power Amp Applications

©2336

Features

- . Wide ASO (adoption of MBIT process)
- . Low saturation voltage
- . High reliability

Absolute Maximum Ratings at Ta=25°C

			unit
Collector to Base Voltage	V _{CB0}	60	V
Collector to Emitter Voltage	V _{CEO}	60	V
Emitter to Base Voltage	V _{EBO}	6	V
Collector Current	I _C	3	A
Peak Collector Current	i _{cp}	8	A
Collector Dissipation	P _C	1.75	W
		30	W
Junction Temperature	T _J	150	°C
Storage Temperature	T _{stg}	-55 to +150	°C

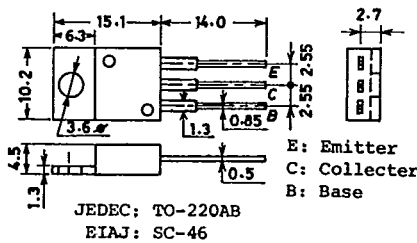
Electrical Characteristics at Ta=25°C

			min	typ	max	unit
Collector Cutoff Current	I _{CB0}	V _{CB} =40V, I _E =0			100	uA
Emitter Cutoff Current	I _{EBO}	V _{EB} =4V, I _C =0			100	uA
DC Current Gain	h _{FE} (1)	V _{CE} =5V, I _C =0.5A	70*		280*	
	h _{FE} (2)	V _{CE} =5V, I _C =3A	20			
Gain-Bandwidth Product	f _T	V _{CE} =5V, I _C =0.5A		100		MHz
Output Capacitance	c _{ob}	V _{CB} =10V, f=1MHz		40		pF
C-E Saturation Voltage	V _{CE(sat)}	I _C =2A, I _B =0.2A	0.4		1	V
Base to Emitter Voltage	V _{BE}	V _{CE} =5V, I _C =0.5A	0.8		1	V
C-B Breakdown Voltage	V _{(BR)CBO}	I _C =1mA, I _E =0	60			V
C-E Breakdown Voltage	V _{(BR)CEO}	I _C =5mA, R _{BE} =∞	60			V
E-B Breakdown Voltage	V _{(BR)EBO}	I _E =1mA, I _C =0	6			V

*: The 2SD1912 is classified by 0.5A h_{FE} as follows:

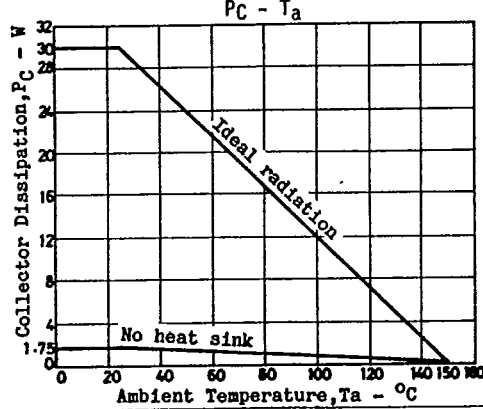
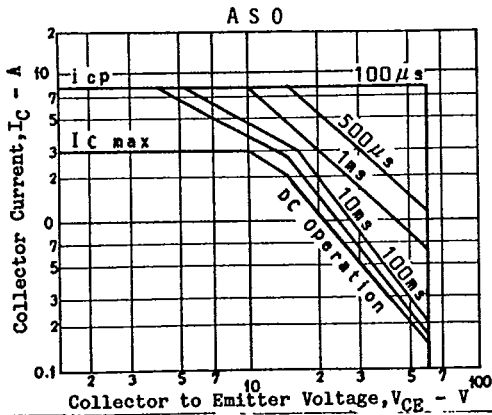
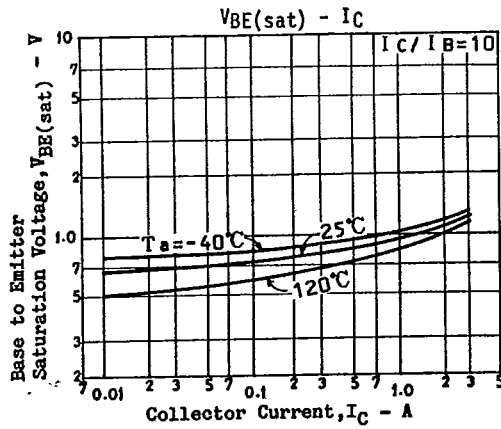
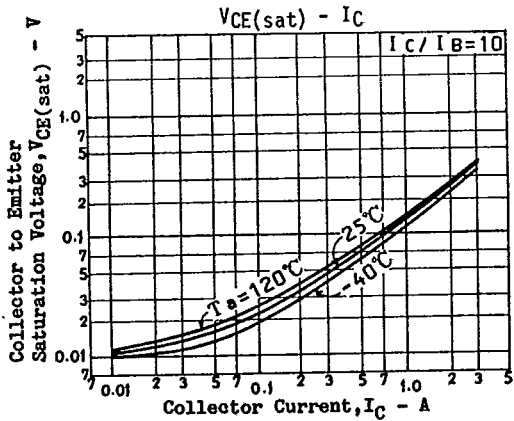
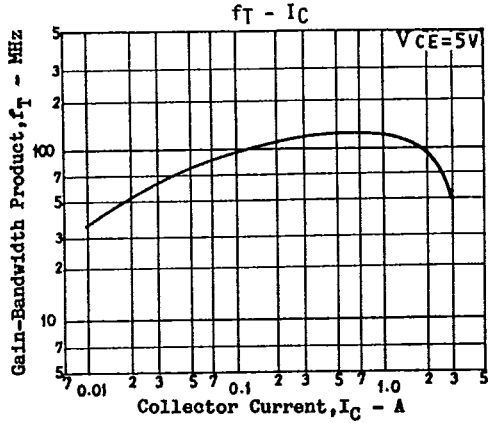
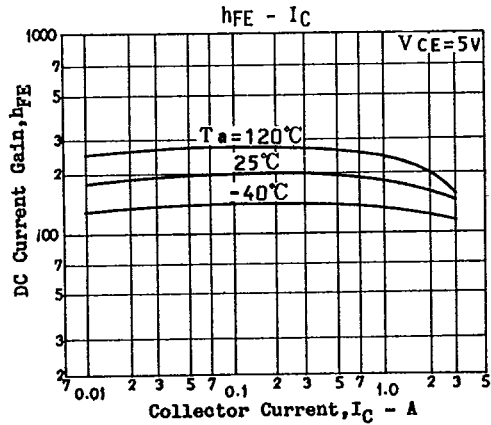
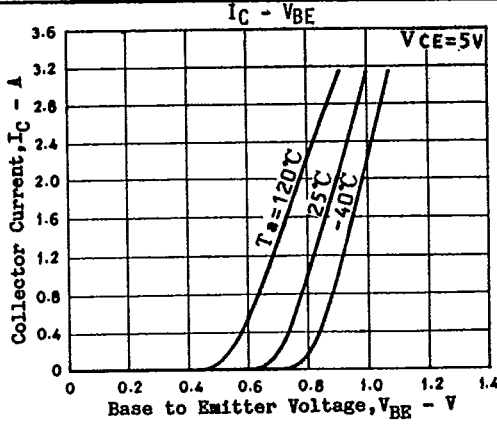
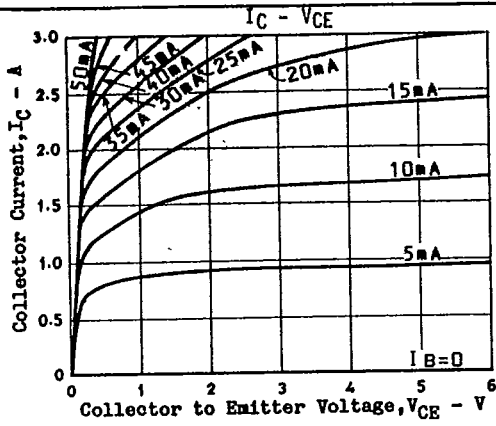
70	Q	140	100	R	200	140	S	280
----	---	-----	-----	---	-----	-----	---	-----

Case Outline 2010A
(unit:mm)



2SD1912

T-33-09



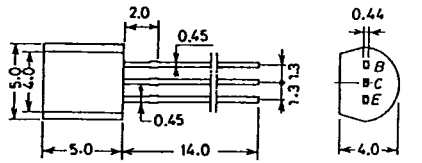
T-91-20

CASE OUTLINES AND ATTACHMENTS

- All of Sanyo Transistor case outlines are illustrated below.
- All dimensions are in mm, and dimensions which are not followed by min. or max. are represented by typical values.
- No marking is indicated.

Case Outline-[2003A]

unit:mm

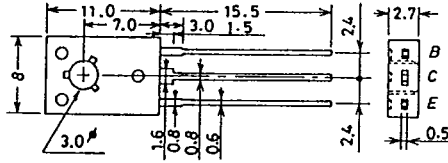


JEDEC: TO-92
EIAJ: SC-43
SANYO: NP

B. Base
C. Collector
E. Emitter

Case Outline-[2009A]

unit:mm

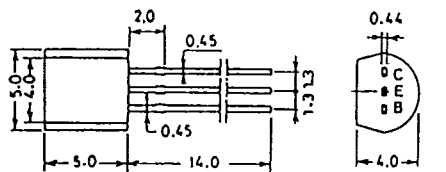


JEDEC: TO-126

B: Base
C: Collector
E: Emitter

Case Outline-[2004A]

unit:mm

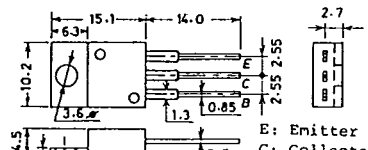


JEDEC: TO-92
EIAJ: SC-43
SANYO: NP

C. Collector
E. Emitter
B. Base

Case Outline-[2010A]

unit:mm

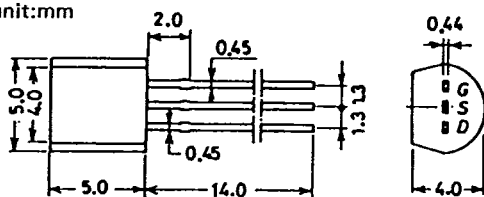


JEDEC: TO-220AB
EIAJ: SC-46

E: Emitter
C: Collector
B: Base

Case Outline-[2005A]

unit:mm

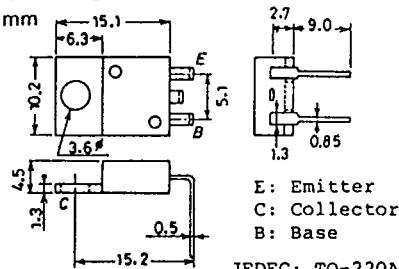


JEDEC: TO-92
EIAJ: SC-43
SANYO: NP

G: Gate
S: Source
D: Drain
B: Base
C: Collector

Case Outline-[2012]

unit:mm

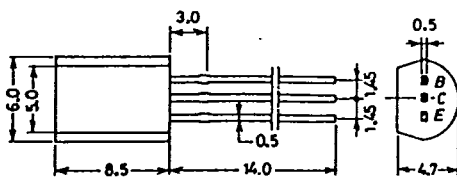


JEDEC: TO-220AA
EIAJ: SC-45

E: Emitter
C: Collector
B: Base

Case Outline-[2006A]

unit:mm

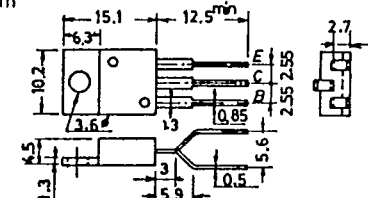


EIAJ: SC-51
SANYO: MP

B: Base
C: Collector
E: Emitter

Case Outline-[2013]

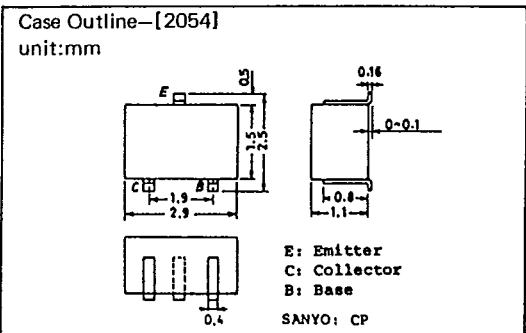
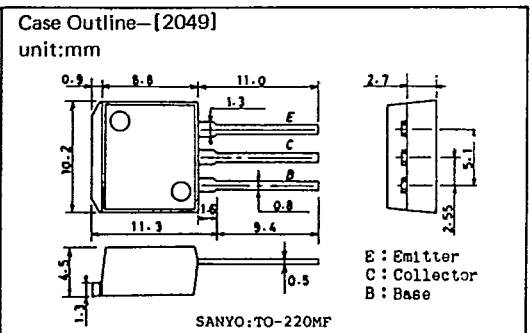
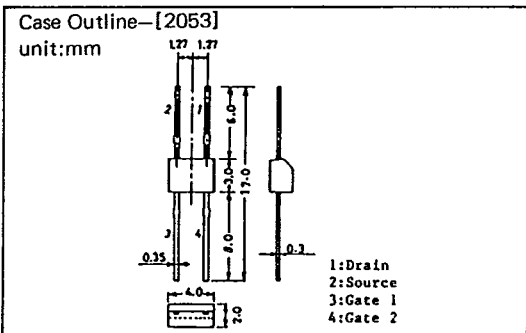
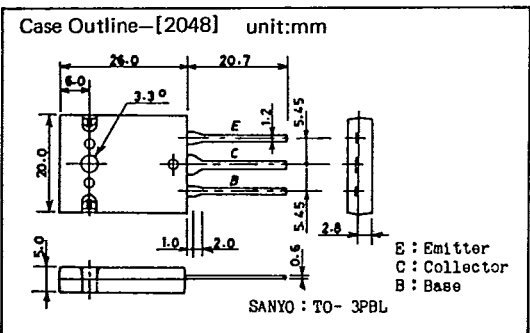
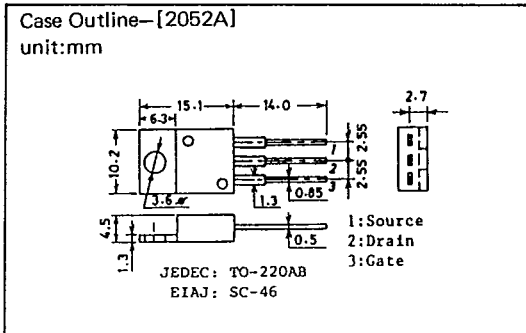
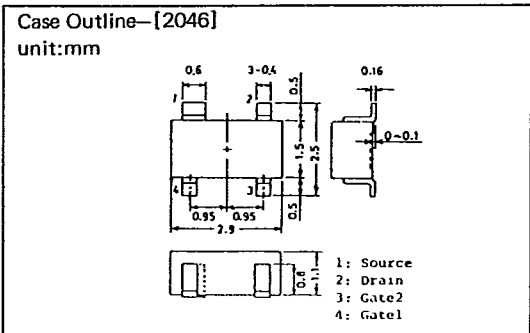
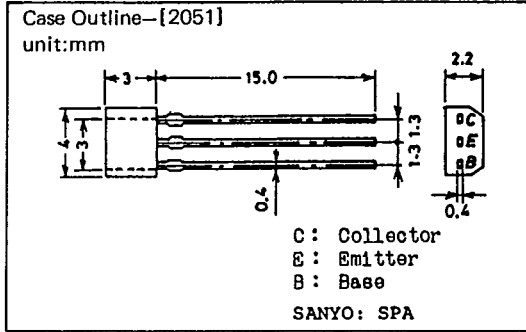
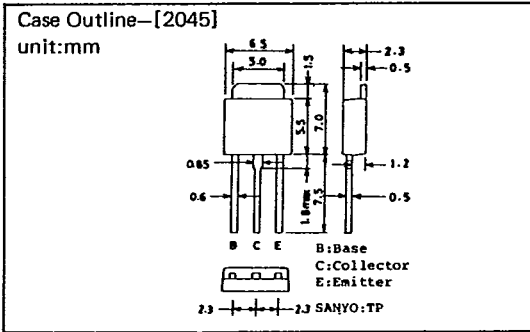
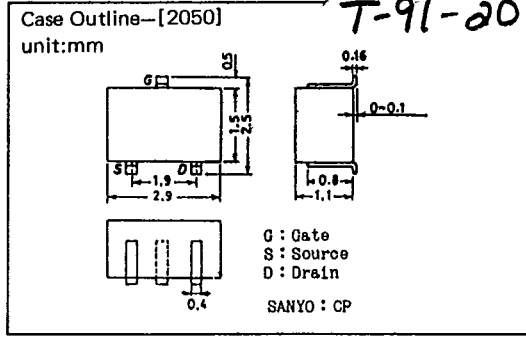
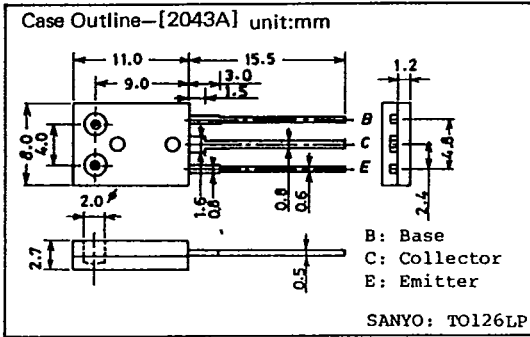
unit:mm



JEDEC TO-220

B: Base
C: Collector
E: Emitter

T-91-20



T-91-20

