SANYO SEMICONDUCTOR COL 查询2SC930供应商	RP	建多并	。 , 是 业 PCB 封 程	日子与24月6月加速出货 8
2SC930	F10	D.COM	Τ-	-31-15 -31-17
- LE FE WY	2033	2003A	NPN Epitaxial Silicon Tra	Planar
	AM	Converter,		
©545E			pplicati	
The 2SC930 has two types of packge: SPA and NP.				
Use				WWW.
• FM RF amp, mixer, OSC, c		and IF amplifier.		
Absolute Maximum Ratings at		2SC930SPA	25C9 30NP	unit
Collector to Base Voltage Collector to Emitter Volta	ge V <sub>CEO</sub>	30 20	30	V
Emitter to Base Voltage	VEBO	20 5	20 5	V
Collector Current	IC	30	30	V mA
Collector Dissipation Junction Temperature	PC	120	250	mW
Storage Temperature	Tj <sup>T</sup> stg	125 -40 to +125 -55 f	125	°C
Electrical Characteristics at		-40 CO TIZO -55 1	to +125	°C
Collector Cutoff Current	ICBO		min typ	max unit
Emitter Cutoff Current	ICBO IEBO	V <sub>CB</sub> =10V, I <sub>E</sub> =0 V <sub>EB</sub> =4V, I <sub>C</sub> =0		1 uA 1 uA
DC Current Gain	h <sub>FE</sub>	VCE=6V, IC=1mA	40* 80	1 uA 320*
Gain Bandwidth Product Reverse Transfer capacitanc	fT	VCE=6V, IC=1mA	170 300	MHz
 Leveloe Hanster capacitanc	e cre	$V_{CB}=6V$ , $I_C=1MHz$ (2509)		1.6 pF
Base to Collector	rbb'cc	V <sub>CB</sub> =6V, f=1MHz (2sc9 V <sub>CE</sub> =6V, I <sub>C</sub> =1mA	30NP)1.0 1.3 20	1.8 pF
Time Constant		f=31.9MHz	20	36 pS
Noise Figure	NF	VCE=6V, IC=1mA	4.0	dB
Turn-on Time	ton	f=100MHz V <sub>IN</sub> =+12V,V <sub>BB</sub> =-3V,	30	ns and
Turn-off Time	<b>.</b> .	appointed circuit	55	
	toff	V <sub>IN</sub> =-12V,V <sub>BB</sub> =+3V, appointed circuit	. 30	ns co
		appointed circuit		
<u>.</u>				WWWWWWWW
*The 2SC930 is graded as fo	llows by ]			WWW.0ZSU
40 0 00 00 00 000	T	ImA hFE:		WWW.DL
*The 2SC930 is graded as fo 40 C 80 60 D 120	100 E	lmA h <sub>FE</sub> :		WWW.OL
40 C 80 60 D 120	100 E	lmA h <sub>FE</sub> :		WWW.DE
40 C 80 60 D 120 Case Outline 2033	100 E	lmA h <sub>FE</sub> : 200 160 F 320 Case Outlin	ne 2003A	WWW.DE
40 C 80 60 D 120 Case Outline 2033 (unit:mm)	100 E	lmA h <sub>FE</sub> :	ne 2003A	
40 C 80 60 D 120 Case Outline 2033	100 E	lmA h <sub>FE</sub> : 200 160 F 320 Case Outlin	ne 2003A	0.44
40 C 80 60 D 120 Case Outline 2033 (unit:mm)	100 E	lmA h <sub>FE</sub> : 200 160 F 320 Case Outlin	ne 2003A	
40 C 80 60 D 120   Case Outline 2033   (unit:mm)	100 E	lmA h <sub>FE</sub> : 200 160 F 320 Case Outlin	ne 2003A	
40 C 80 60 D 120   Case Outline 2033   (unit:mm)	100 E	ImA h <sub>FE</sub> : 200 160 F 320 Case Outlin (unit:mm) 20 11 11 11 11 11 11 11 11 11 1		
40   C   80   60   D   120     Case Outline 2033 (unit:mm)   15.0   15.0   17.0   17.0     11   15.0   15.0   17.0   17.0   17.0     12   13   15.0   15.0   17.0   17.0     13   15.0   15.0   15.0   17.0   17.0     13   15.0   15.0   15.0   17.0   17.0     14   15.0   15.0   15.0   17.0   17.0     15   15   15.0   15.0   17.0   17.0     15   15   15.0   15.0   17.0   17.0     15   15   15.0   15.0   17.0   17.0     16   17.0   15.0   15.0   17.0   17.0     17   18.0   18.0   10.0   10.0   10.0   10.0     17   18.0   19.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0 <td>100 E</td> <td>lmA h<sub>FE</sub>: 200 160 F 320 Case Outlin</td> <td></td> <td></td>	100 E	lmA h <sub>FE</sub> : 200 160 F 320 Case Outlin		
40 C 80 60 D 120   Case Outline 2033   (unit:mm)	100 E	LmA h <sub>FE</sub> : 200 160 F 320 Case Outlin (unit:mm) 20 10 10 10 10 10 10 10 10 10 1	0.45 - 14.0	0.44 ++- • C • C • C • C • C • C • C • C • C • C
40 C 80 60 D 120 Case Outline 2033 (unit:mm)	100 E	ImA h <sub>FE</sub> : 200 160 F 320 Case Outlin (unit:mm) 20 10 10 10 10 10 10 10 10 10 1	0.45 0.45 14.0 2 B, Ba	0.44 ++- • C • C • C • C • C • C • C • C • C • C
40 C 80 60 D 120 Case Outline 2033 (unit:mm) B: Base C: Collecto E: Emitter	100 E	LmA h <sub>FE</sub> : 200 160 F 320 Case Outlin (unit:mm) 20 10 10 10 10 10 10 10 10 10 1	0.45 - 14.0	0.44 ++- • C • C • C • C • C • C • C • C • C • C
40 C 80 60 D 120 Case Outline 2033 (unit:mm) B: Base C: Collecto E: Emitter SANYO: SPA	100 E	ImA hFE: 200 160 F 320 Case Outlin (unit:mm) 20 10 10 10 10 10 10 10 10 10 1	0.45 0.45 14.0 B, Ba 3 C. Co E. Em	0.44 ++- • C • C • C • C • C • C • C • C • C • C
40 C 80 60 D 120 Case Outline 2033 (unit:mm) Case Outline 2033 Case Outline 20	100 E	ImA hFE: 200 160 F 320 Case Outlin (unit:mm) 20 100 F 320 Case Outlin (unit:mm) 20 100 F 320 Case Outlin (unit:mm) 20 100 F 320 100 F 320 1	0.45 0.45 14.0 B, Ba 3 C. Co E. Em	0.44 ++- • C • C • C • C • C • C • C • C • C • C
40 C 80 60 D 120 Case Outline 2033 (unit:mm) B: Base C: Collecto E: Emitter SANYO: SPA	100 E	ImA hFE: 200 160 F 320 Case Outlin (unit:mm) 20 100 F 320 Case Outlin (unit:mm) 20 100 F 320 Case Outlin (unit:mm) 20 100 F 320 100 F 320 1	0.45 0.45 14.0 B, Ba 3 C. Co E. Em	0.44 ++- • C • C • C • C • C • C • C • C • C • C
40 C 80 60 D 120 Case Outline 2033 (unit:mm) Case Outline 2033 Case Outline 20	100 E	ImA hFE: 200 160 F 320 Case Outlin (unit:mm) 20 100 F 320 Case Outlin (unit:mm) 20 100 F 320 Case Outlin (unit:mm) 20 100 F 320 100 F 320 1	0.45 0.45 14.0 B, Ba 3 C. Co E. Em	0.44 ++- • C • C • C • C • C • C • C • C • C • C
40 C 80 60 D 120 Case Outline 2033 (unit:mm) Case Outline 2033 Case Outline 20	100 E	ImA hFE: 200 160 F 320 Case Outlin (unit:mm) 20 100 F 320 Case Outlin (unit:mm) 20 100 F 320 Case Outlin (unit:mm) 20 100 F 320 100 F 320 1	0.45 0.45 14.0 B, Ba 3 C. Co E. Em	0.44 ++- • C • C • C • C • C • C • C • C • C • C
40 C 80 60 D 120 Case Outline 2033 (unit:mm) Case Outline 2033 Case Outline 20	100 E	ImA h <sub>FE</sub> : 200 160 F 320 Case Outlin (unit:mm) 20 10 10 10 10 10 10 10 10 10 1	0.45 0.45 14.0 B, Ba 3 C. Co E. Em	0.44 ***********************************
40   C   80   60   D   120     Case Outline 2033 (unit:mm)     ***********************************	100 E	ImA hFE: 200 160 F 320 Case Outlin (unit:mm) 20 100 F 320 Case Outlin (unit:mm) 20 100 F 320 Case Outlin (unit:mm) 20 100 F 320 100 F 320 1	0.45 0.45 14.0 B, Ba 3 C. Co E. Em	0.44 ***********************************
40 C 80 60 D 120 Case Outline 2033 (unit:mm) Case Outline 2033 Case Outline 20	100 E	ImA h <sub>FE</sub> : 200 160 F 320 Case Outlin (unit:mm) 20 10 10 10 10 10 10 10 10 10 1	0.45 0.45 14.0 B, Ba 3 C. Co E. Em	0.44 ***********************************
40   C   80   60   D   120     Case Outline 2033 (unit:mm)     ***********************************	100 E	ImA h <sub>FE</sub> : 200 160 F 320 Case Outlin (unit:mm) 20 10 10 10 10 10 10 10 10 10 1	0.45 0.45 14.0 B, Ba 3 C. Co E. Em	0.44 ***********************************
40   C   80   60   D   120     Case Outline 2033 (unit:mm)     ***********************************	100 E	ImA h <sub>FE</sub> : 200 160 F 320 Case Outlin (unit:mm) 20 10 10 10 10 10 10 10 10 10 1	0.45 0.45 14.0 B, Ba 3 C. Co E. Em	0.44 ***********************************

### SANYO SEMICONDUCTOR CORP

# 12E D 7997076 0003717 8

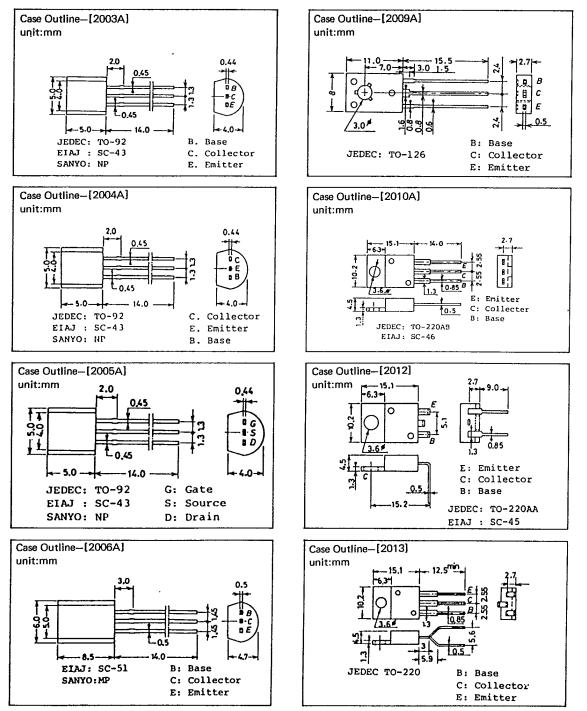
T-91-20

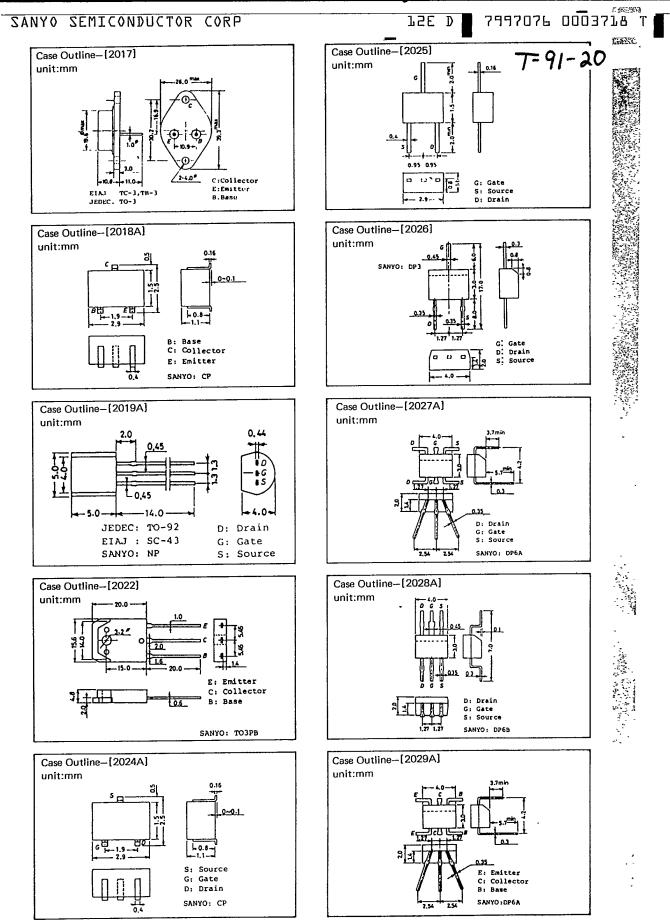
## CASE OUTLINES AND ATTACHMENTS

- •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.

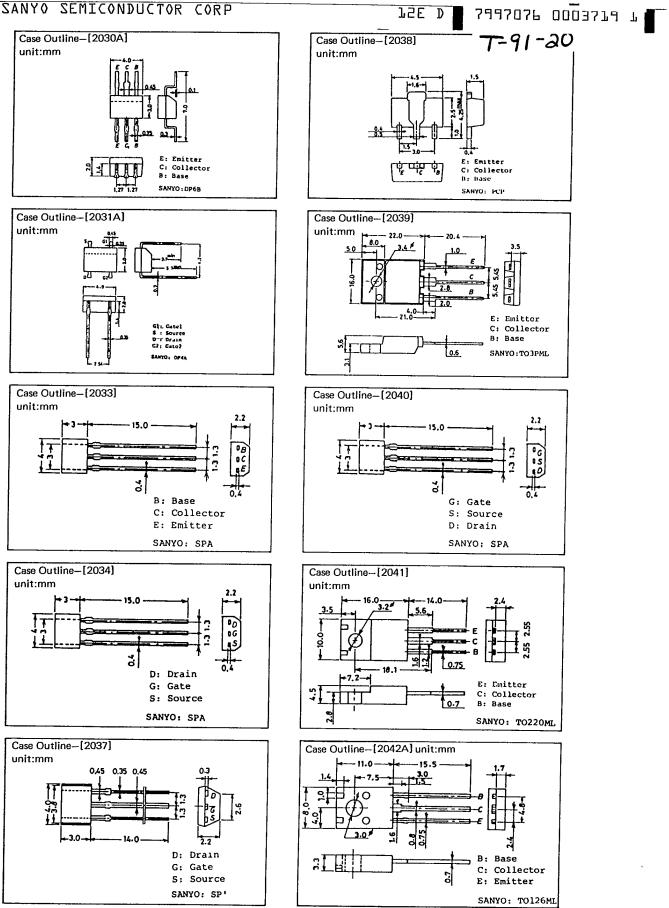
•

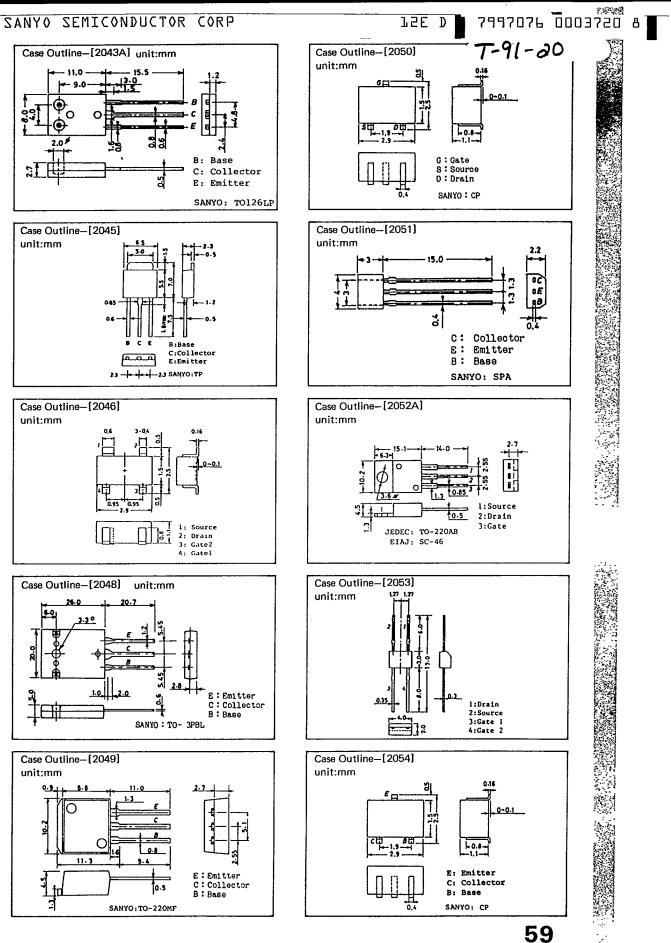
•No marking is indicated.

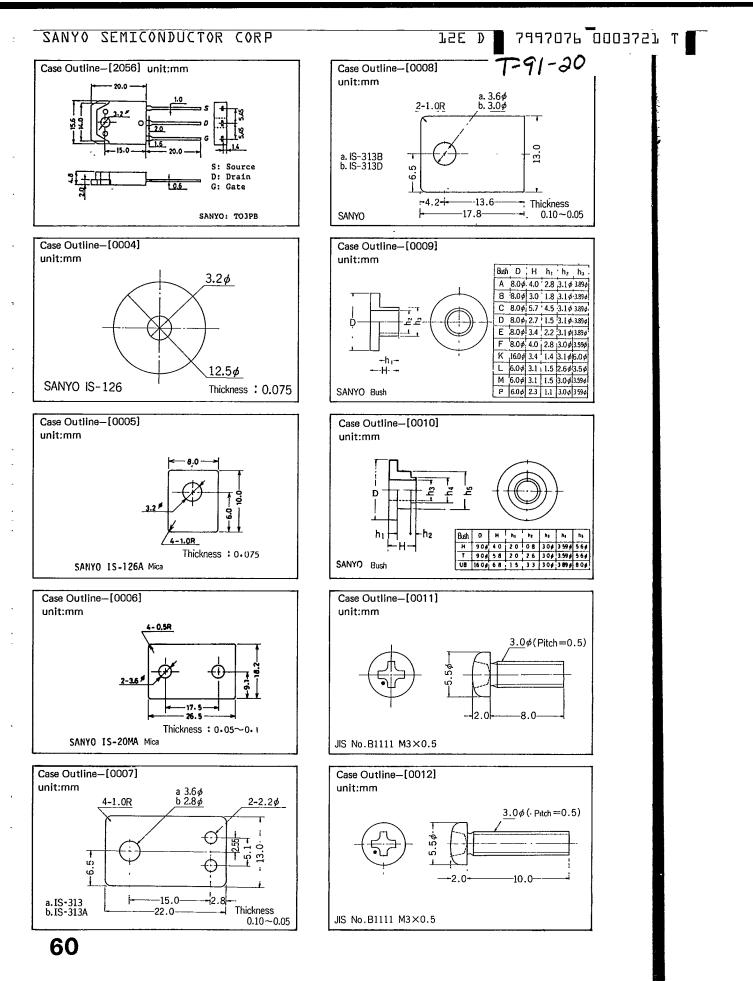


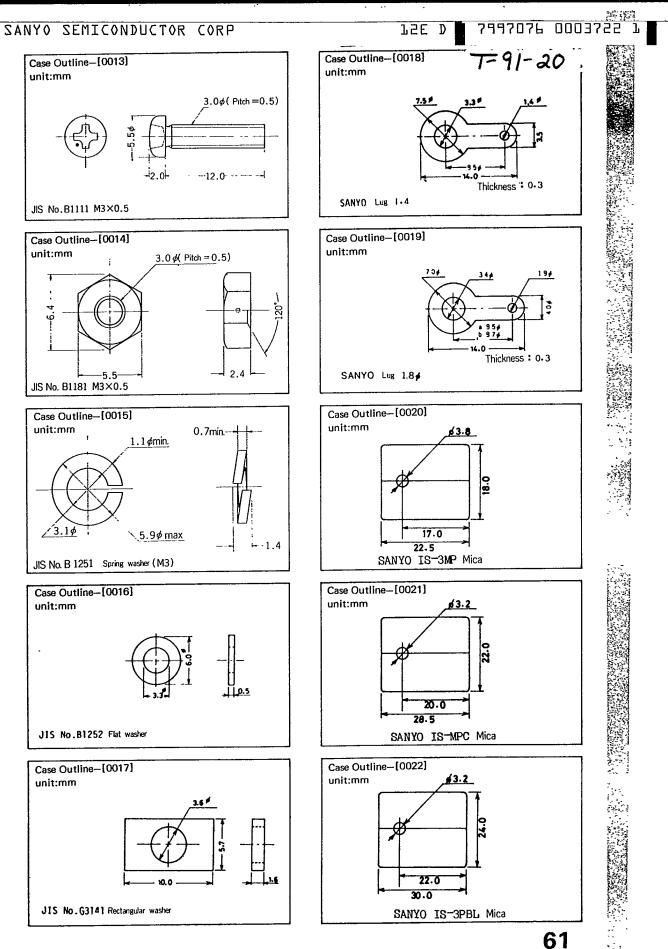


## SANYO SEMICONDUCTOR CORP









----

: .