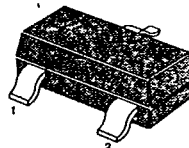


MMBT5086**PNP EPITAXIAL SILICON TRANSISTOR****LOW NOISE TRANSISTOR****ABSOLUTE MAXIMUM RATINGS ($T_a = 25^\circ\text{C}$)**

Characteristic	Symbol	Rating	Unit
Collector-Base Voltage	V_{CBO}	50	V
Collector-Emitter Voltage	V_{CEO}	50	V
Emitter-Base Voltage	V_{EBO}	3	V
Collector Current	I_C	50	mA
Collector Dissipation	P_C	350	mW
Storage Temperature	T_{stg}	150	$^\circ\text{C}$

SOT-23

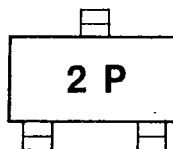


1. Base 2. Emitter 3. Collector

ELECTRICAL CHARACTERISTICS ($T_a = 25^\circ\text{C}$)

Characteristic	Symbol	Test Condition	Min	Max	Unit
Collector-Base Breakdown Voltage	BV_{CBO}	$I_C = 100\mu\text{A}, I_E = 0$	50		V
Collector-Emitter Breakdown Voltage	BV_{CEO}	$I_C = 1\text{mA}, I_B = 0$	50		V
Collector Cutoff Current	I_{CBO}	$V_{CB} = 35\text{V}, I_E = 0$		50	nA
DC Current Gain	h_{FE}	$V_{CE} = 5\text{V}, I_C = 100\mu\text{A}$	150	500	
		$V_{CE} = 5\text{V}, I_C = 1\text{mA}$	150		
		$V_{CE} = 5\text{V}, I_C = 10\text{mA}$	150		
Collector-Emitter Saturation Voltage	$V_{CE}(\text{sat})$	$I_C = 10\text{mA}, I_B = 1\text{mA}$		0.3	V
Base-Emitter Saturation Voltage	$V_{BE}(\text{sat})$	$I_C = 10\text{mA}, I_B = 1\text{mA}$		0.85	V
Current Gain-Bandwidth Product	f_T	$I_C = 500\mu\text{A}, V_{CE} = 5\text{V}$ $f = 20\text{MHz}$	40		MHz
Output Capacitance	C_{ob}	$V_{CB} = 5\text{V}, I_E = 0$ $f = 100\text{kHz}$		4	pF
Noise Figure	NF	$I_C = 100\mu\text{A}, V_{CE} = 5\text{V}$ $f = 1\text{kHz}, R_S = 3\text{k}\Omega$		3	dB

3

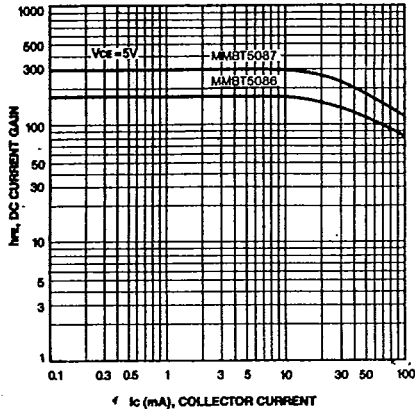
Marking

MMBT5086

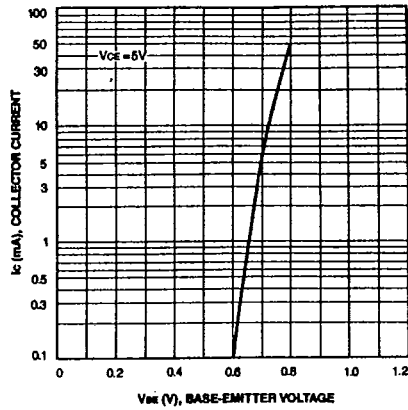
PNP EPITAXIAL SILICON TRANSISTOR

T-29-19

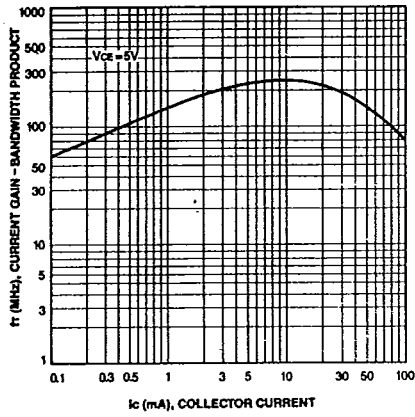
DC CURRENT GAIN



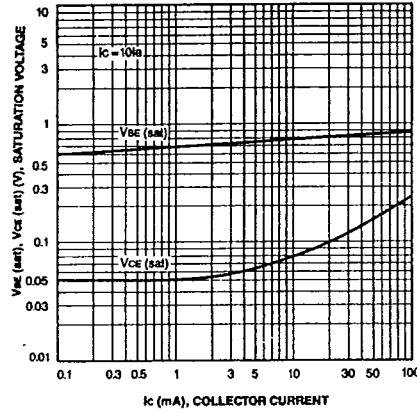
BASE-EMITTER ON VOLTAGE



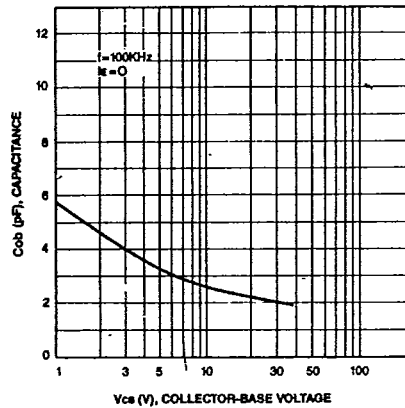
CURRENT GAIN BANDWIDTH PRODUCT



BASE-EMITTER SATURATION VOLTAGE
COLLECTOR-EMITTER SATURATION VOLTAGE

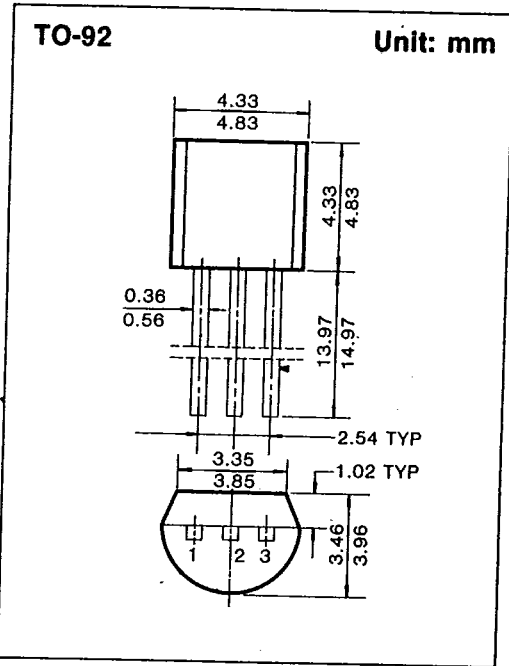
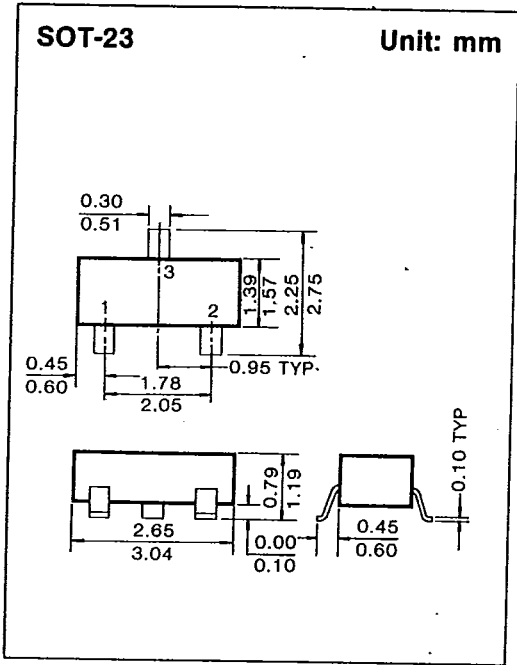


OUTPUT CAPACITANCE

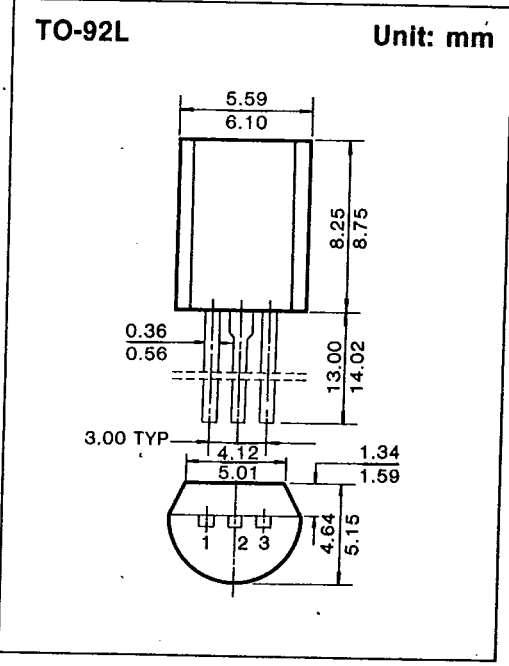
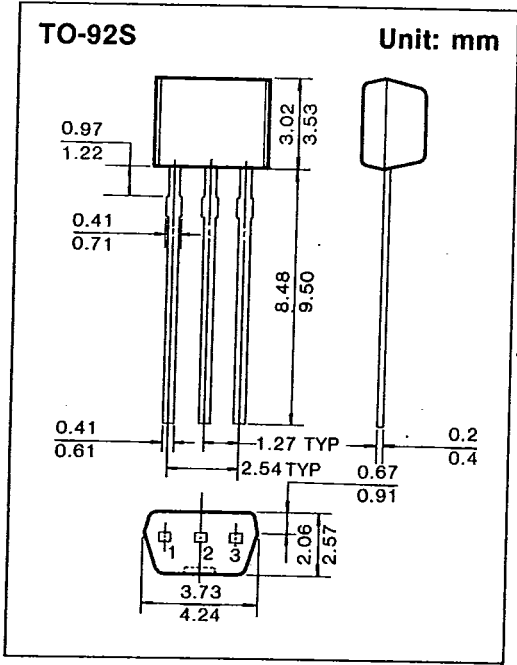


T91-20

PACKAGE DIMENSIONS

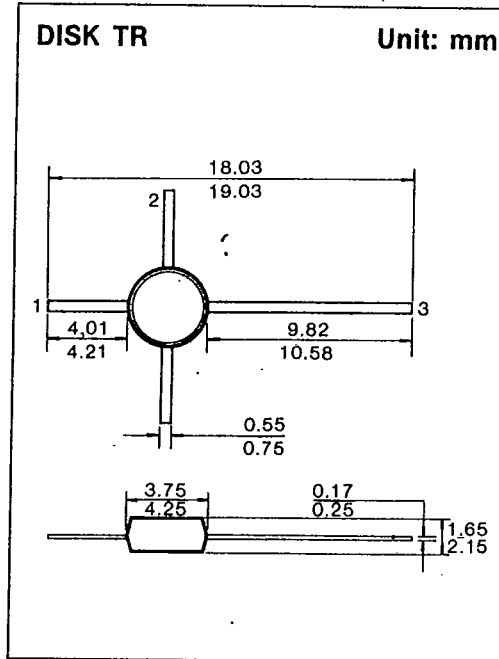
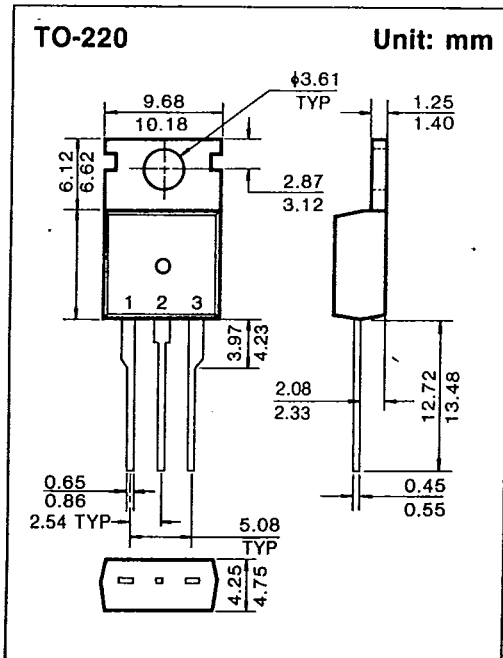
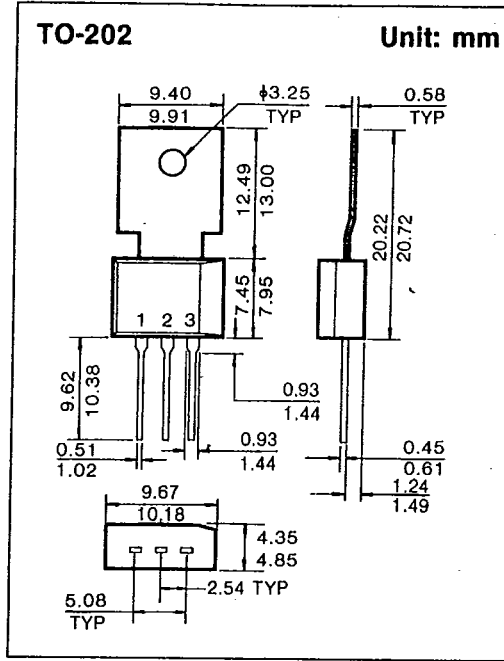
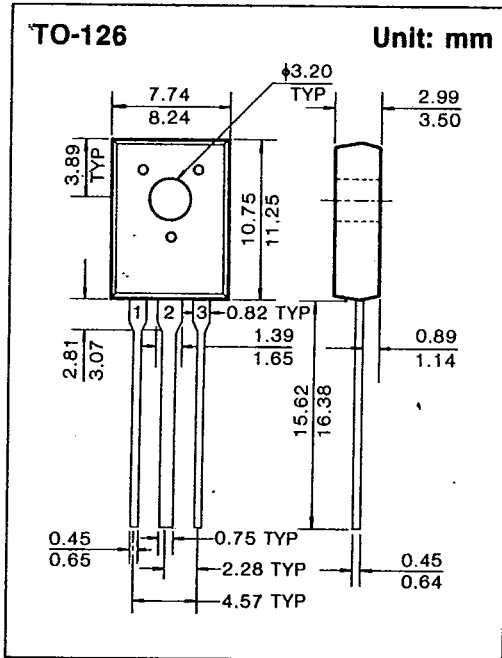


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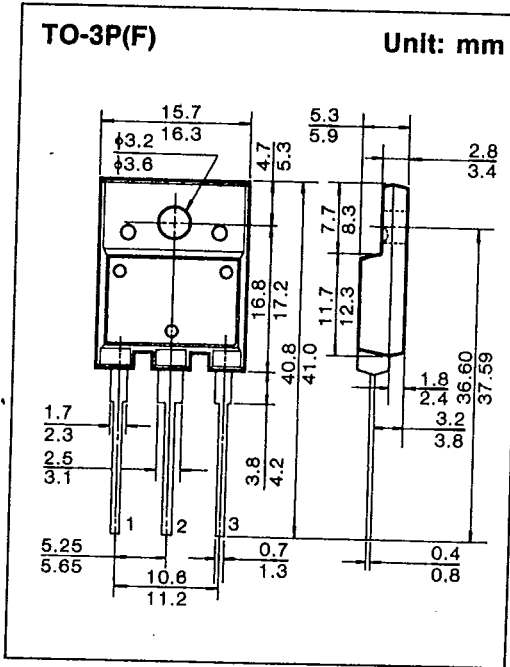
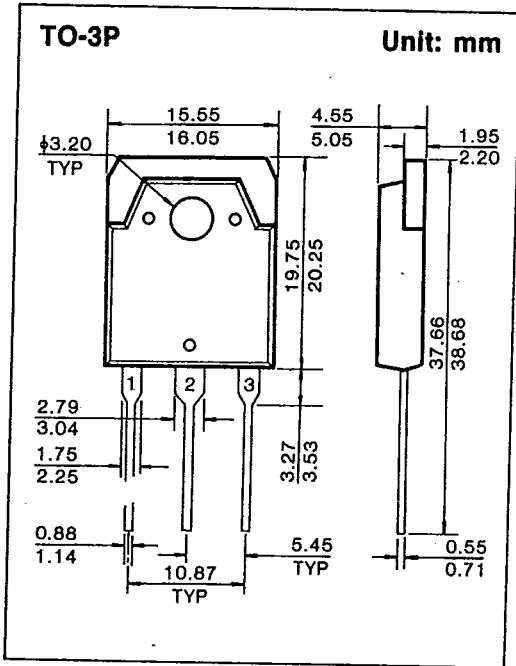
PACKAGE DIMENSIONS

T-91-20

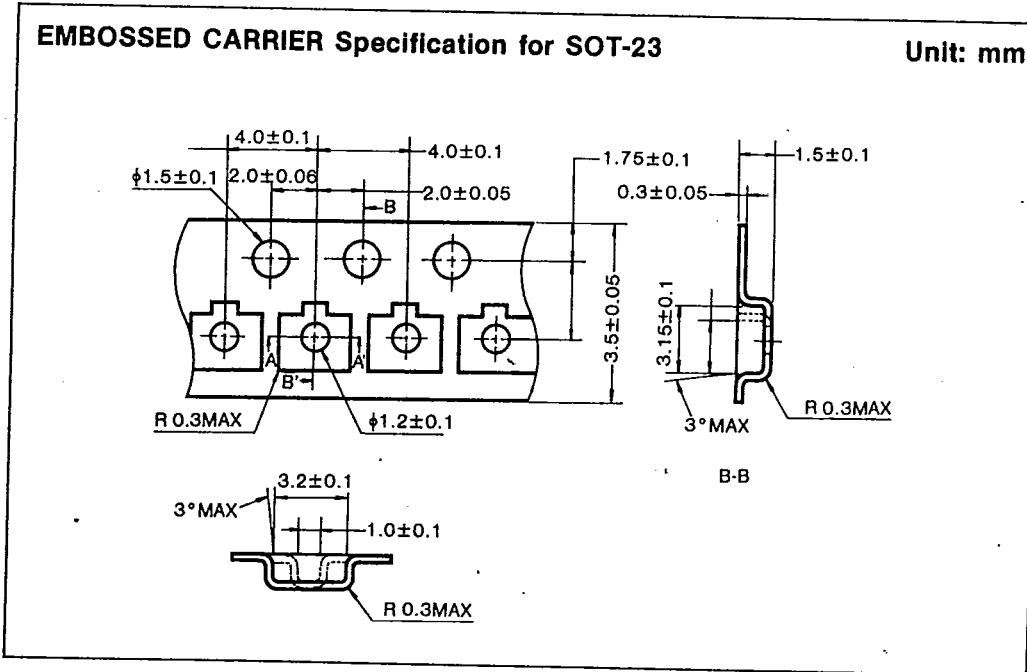


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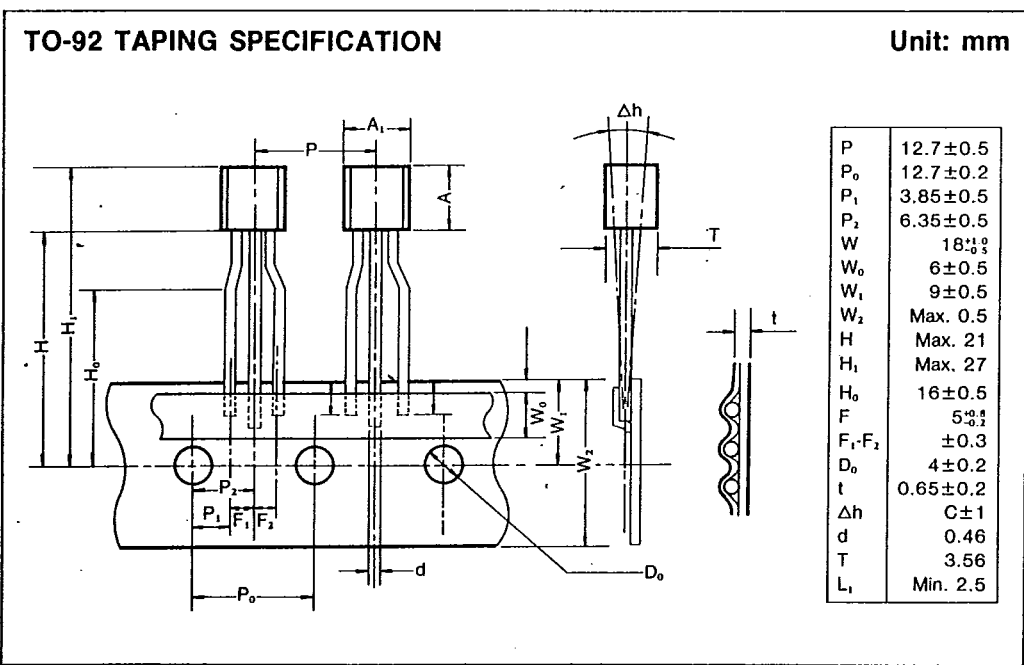
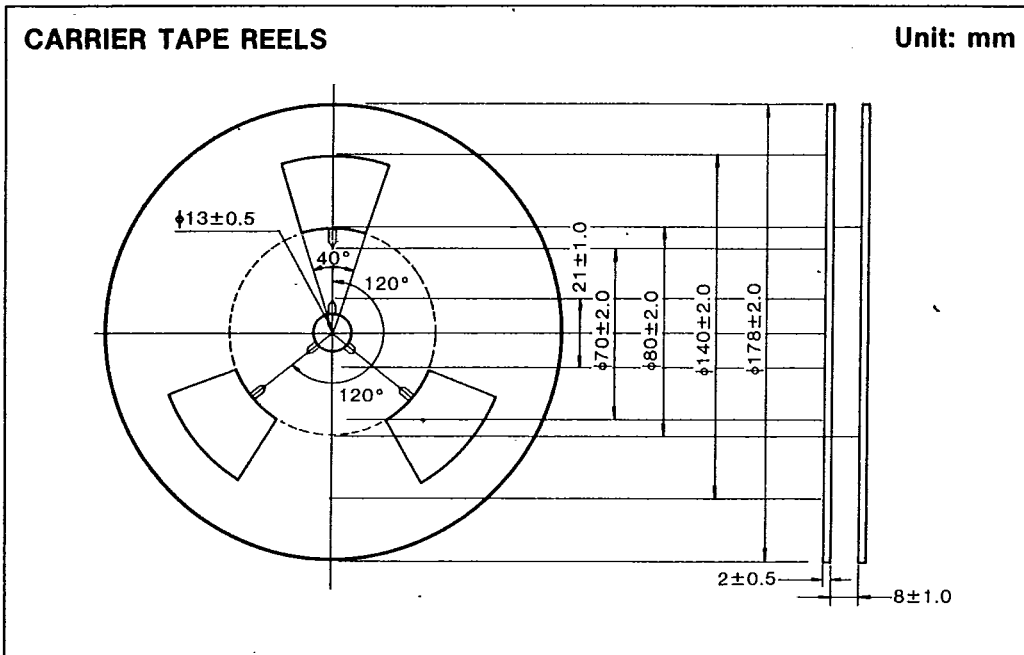


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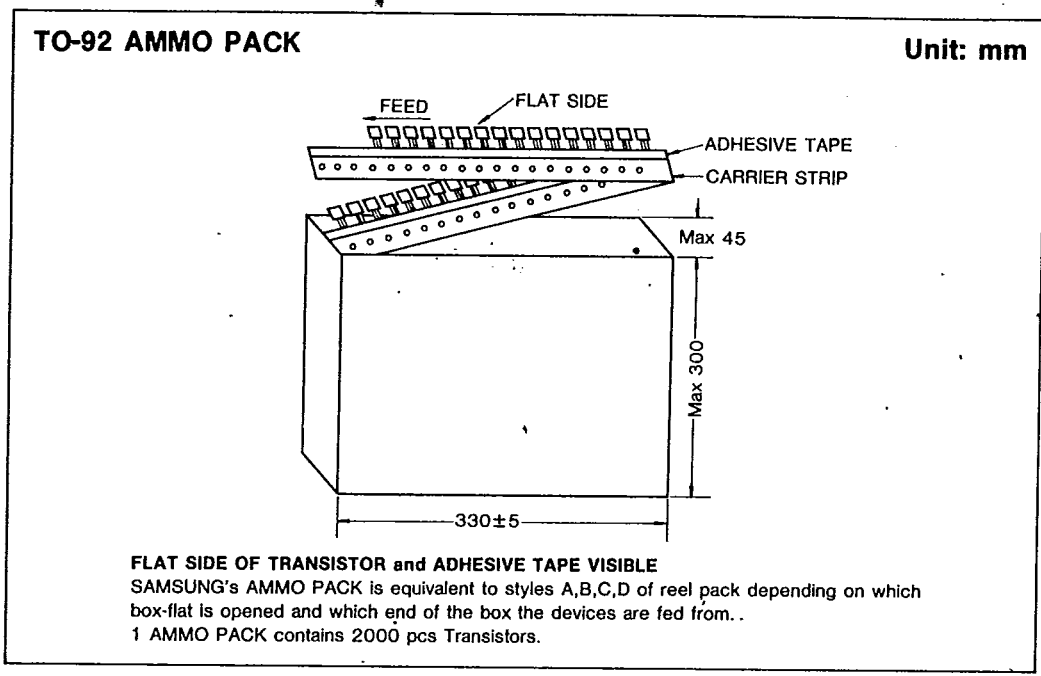
PACKAGE DIMENSIONS

T-91-20.



PACKAGE DIMENSIONS

T-91-20



4