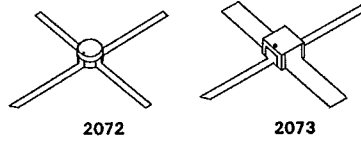


**2SK1240-1243
(HEMT Series)**



N-Channel AlGaAs/GaAs
Hetero Junction FET

T-31-25

**X-Band Very Low-Noise
Amp Applications**

©3186

Features

- Very low noise
- High associated gain
- Our proprietary technology for forming stress-free SiNx protection film can provide the same high reliability as for MES FETs currently in use.
- AlGaAs/GaAs hetero junction

TENTATIVE



() : 2SK1241, 2SK1243

Absolute Maximum Ratings at Ta = 25°C

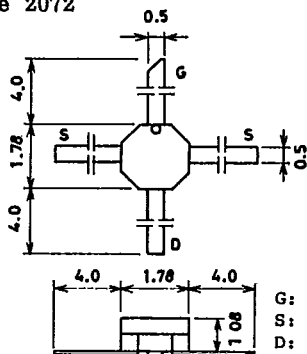
		unit
Drain to Source Voltage	V _{DS}	4 V
Gate to Source Voltage	V _{GS}	-3 V
Drain Current	I _D	60 mA
Gate Current	I _G	10 μA
Allowable Power Dissipation	P _D	180 mW
Junction Temperature	T _j	150 °C
Storage Temperature	T _{stg}	-65 to +150 °C

Electrical Characteristics at Ta = 25°C

		min	typ	max	unit
Gate to Drain Breakdown Voltage	V _{(BR)GDS} I _G = -10μA, V _{DS} = 0V	-3			V
Gate Cutoff Current	I _{GSS} V _{GS} = -3V, V _{DS} = 0V			-10	μA
Gate to Source Cutoff Voltage	V _{GS(off)} V _{DS} = 2V, I _D = 100μA	-0.5		-2.5	V
Drain Current	I _{DSS} V _{DS} = 2V, V _{GS} = 0V	10	30	60	mA
Forward Transfer Admittance	y _{fs} V _{DS} = 2V, I _D = 10mA	30	40		mS
Noise Figure	NF V _{DS} = 2V, I _D = 10mA, f = 12GHz			(1.2)1.4	dB
Associated Gain	Ga V _{DS} = 2V, I _D = 10mA, f = 12GHz	9.0			dB

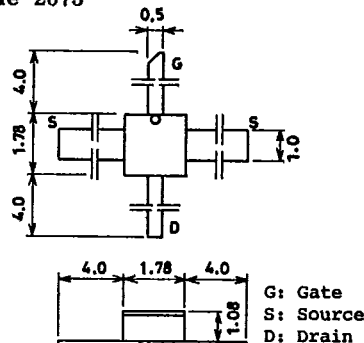
25K1240, 25K1241

Case Outline 2072
(unit : mm)



25K1242, 25K1243

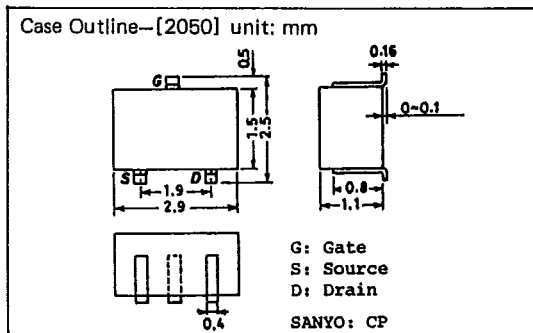
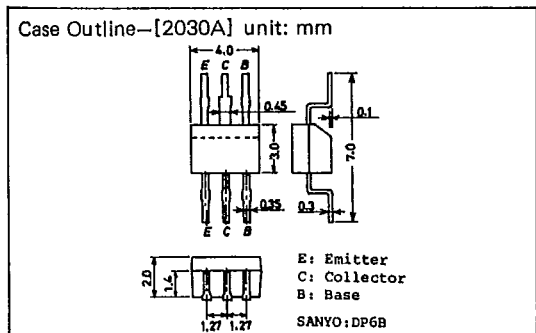
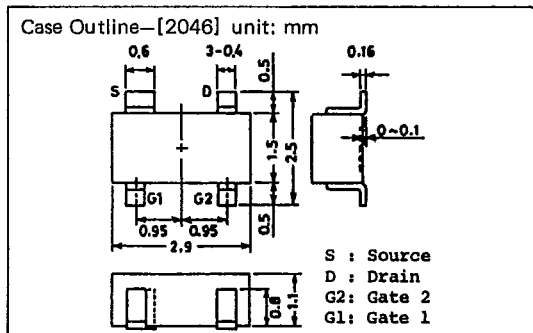
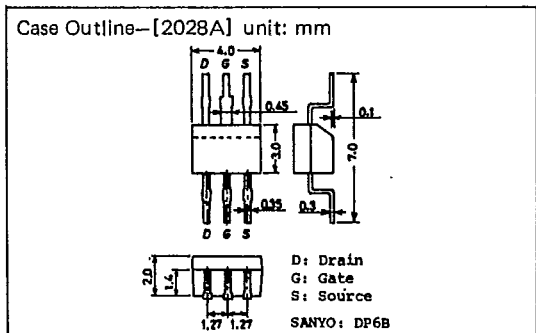
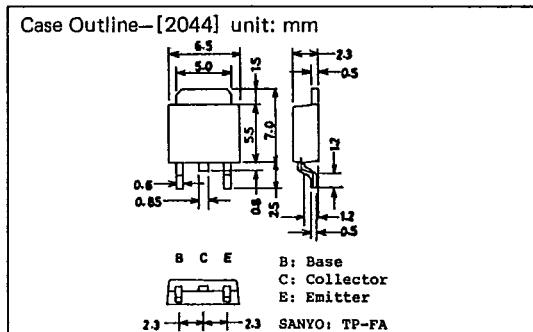
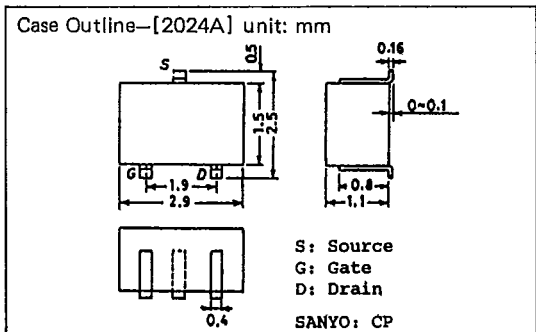
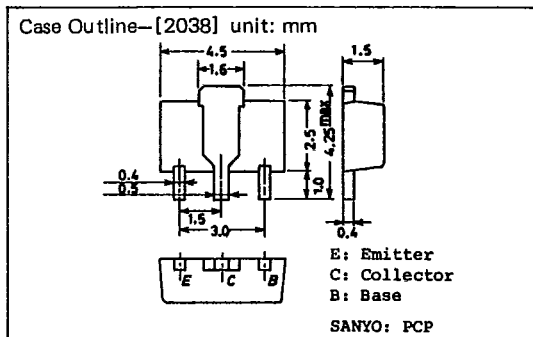
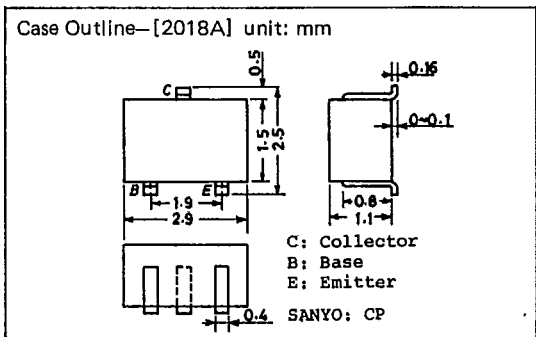
Case Outline 2073
(unit : mm)



T-91-20

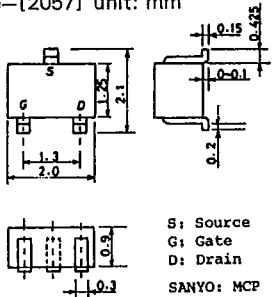
CASE OUTLINES OF SURFACE MOUNT TRANSISTORS

- All of Sanyo surface mount 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.



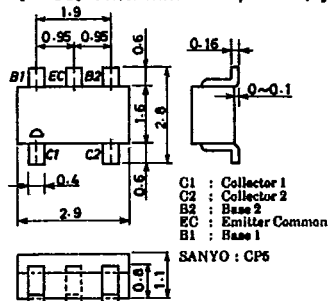
T-91-20

Case Outline—[2057] unit: mm



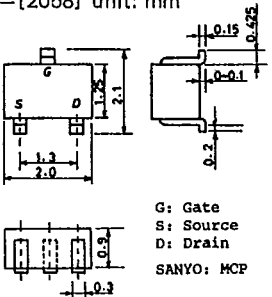
S: Source
G: Gate
D: Drain
SANYO: MCP

Case Outline—[2066] unit: mm



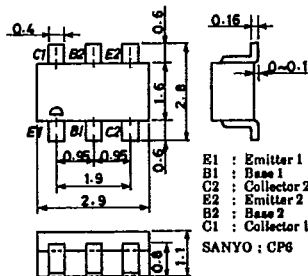
C1 : Collector 1
C2 : Collector 2
B2 : Base 2
EC : Emitter Common
B1 : Base 1
SANYO : CP6

Case Outline—[2058] unit: mm



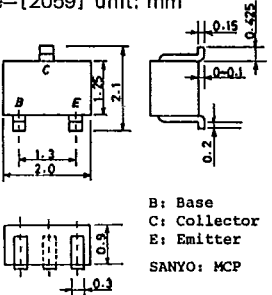
G: Gate
S: Source
D: Drain
SANYO: MCP

Case Outline—[2067] unit: mm



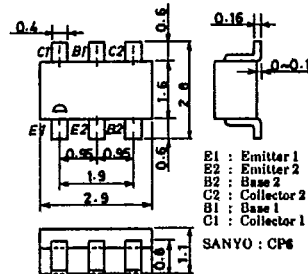
E1 : Emitter 1
B1 : Base 1
C2 : Collector 2
E2 : Emitter 2
B2 : Base 2
C1 : Collector 1
SANYO : CP6

Case Outline—[2059] unit: mm



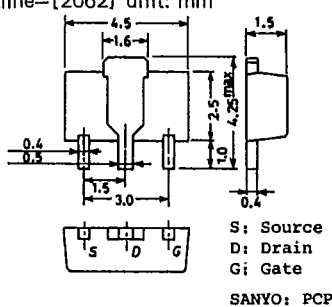
B: Base
C: Collector
E: Emitter
SANYO: MCP

Case Outline—[2068] unit: mm



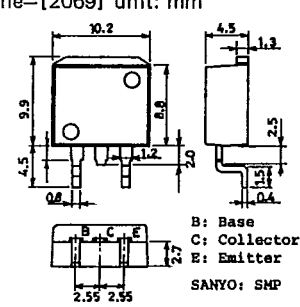
B1 : Emitter 1
E2 : Emitter 2
B2 : Base 2
C2 : Collector 2
B1 : Base 1
C1 : Collector 1
SANYO : CP6

Case Outline—[2062] unit: mm



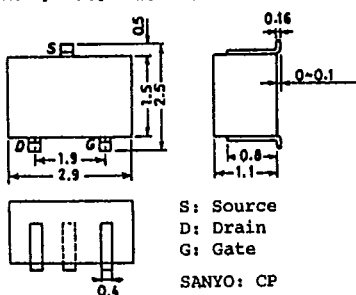
S: Source
D: Drain
G: Gate
SANYO: PCP

Case Outline—[2069] unit: mm



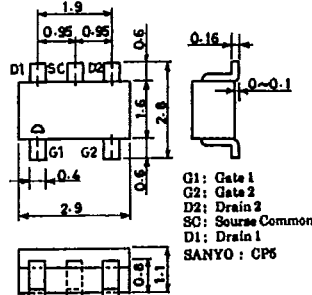
B: Base
C: Collector
E: Emitter
SANYO: SMP

Case Outline—[2065] unit: mm



S: Source
D: Drain
G: Gate
SANYO: CP

Case Outline—[2070] unit: mm



G1 : Gate 1
G2 : Gate 2
D2 : Drain 2
SC : Source Common
D1 : Drain 1
SANYO : CP6

T-9120

