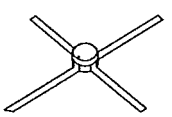
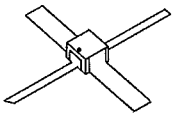
2SK1240-1243 (HEMT Series)

T-31-25


2072


2073

N-Channel AlGaAs/GaAs Hetero Junction FET

X-Band Very Low-Noise Amp Applications

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

( ) : 2SK1241,2SK1243

Absolute Maximum Ratings at Ta = 25°C

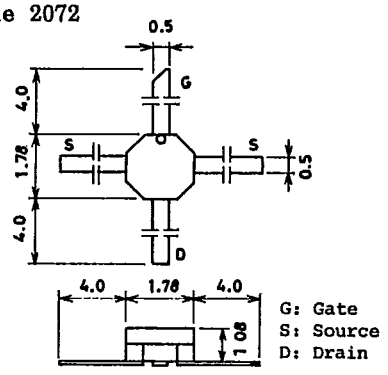
			unit
Drain to Source Voltage	V_{DS}	4	V
Gate to Source Voltage	V_{GS}	−3	V
Drain Current	I_D	60	mA
Gate Current	I_G	10	μA
Allowable Power Dissipation	P_D	180	mW
Junction Temperature	Tj	150	°C
Storage Temperature	Tstg	−65 to +150	°C

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

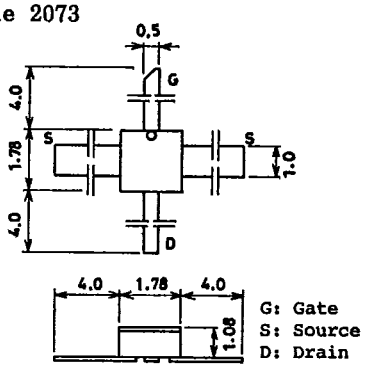
2SK1240, 2SK1241

Case Outline 2072
(unit : mm)



2SK1242, 2SK1243

Case Outline 2073
(unit : mm)

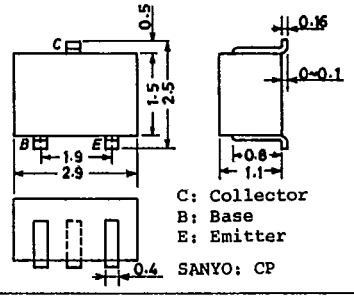


T-91-20

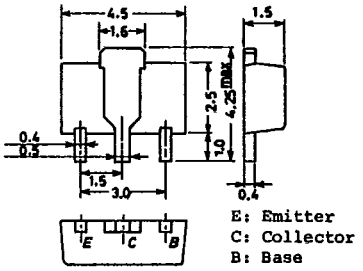
CASE OUTLINES OF SURFACE MOUNT TRANSISTORS

- 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.

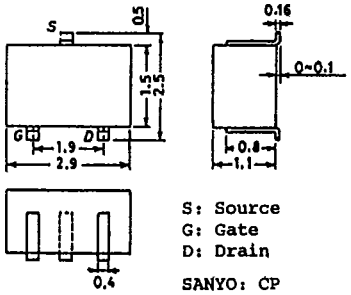
Case Outline—[2018A] unit: mm



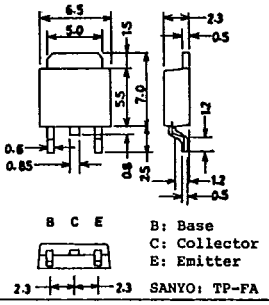
Case Outline—[2038] unit: mm



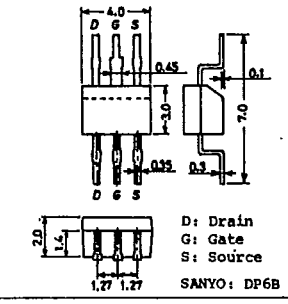
Case Outline—[2024A] unit: mm



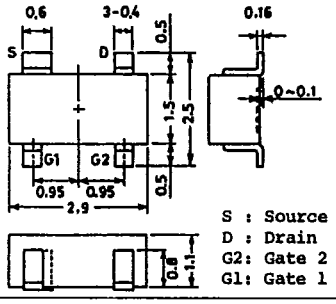
Case Outline—[2044] unit: mm



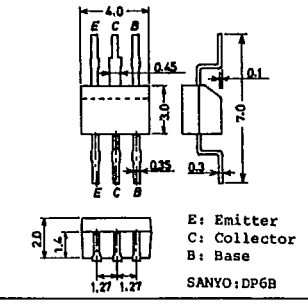
Case Outline—[2028A] unit: mm



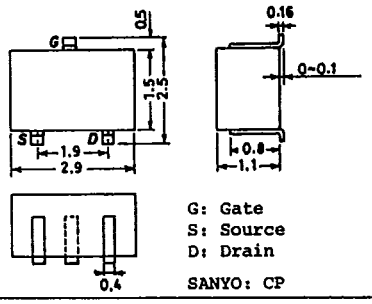
Case Outline—[2046] unit: mm



Case Outline—[2030A] unit: mm



Case Outline—[2050] unit: mm



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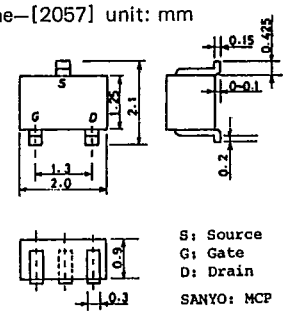
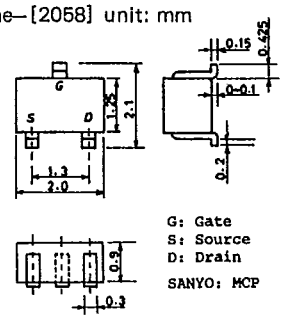
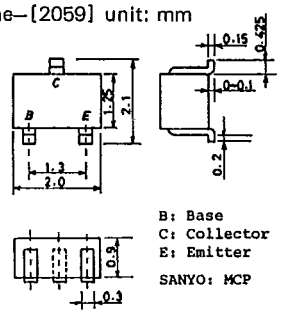
Case Outline—[2057] unit: mm



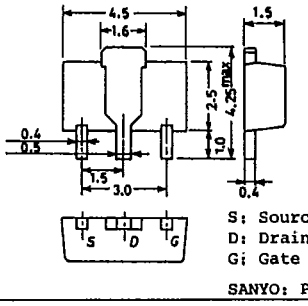
Case Outline—[2058] unit: mm



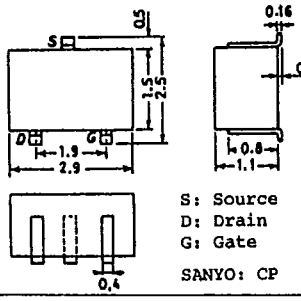
Case Outline—[2059] unit: mm



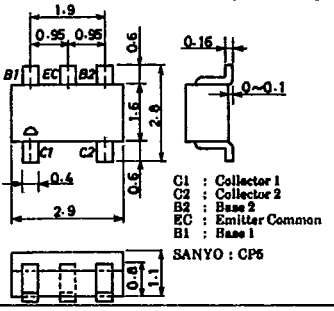
Case Outline—[2062] unit: mm



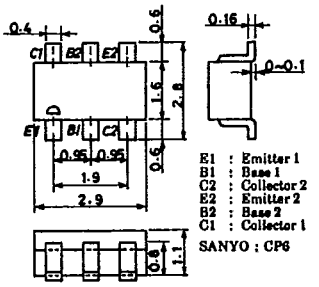
Case Outline—[2065] unit: mm



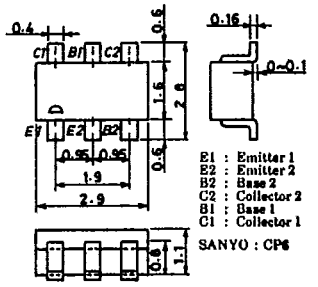
Case Outline—[2066] unit: mm



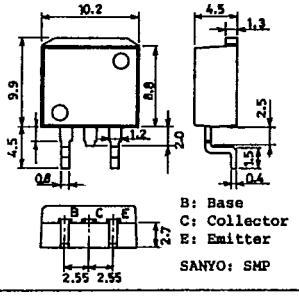
Case Outline—[2067] unit: mm



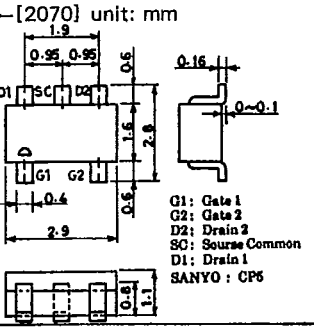
Case Outline—[2068] unit: mm



Case Outline—[2069] unit: mm



Case Outline—[2070] unit: mm



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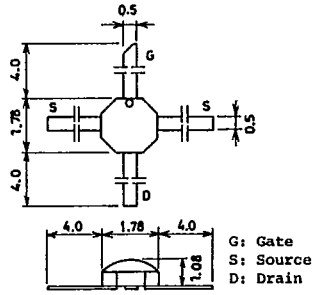
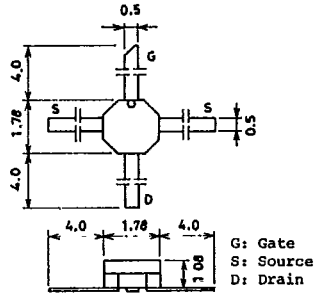
Case Outline—[2071] unit: mm



Case Outline—[2072] unit: mm



Case Outline—[2073] unit: mm