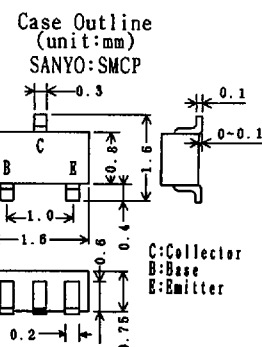


NEW PRODUCT SMCP(Super Mini Chip Pack) Transistor series

The newly developed Sanyo SMCP package can make the sets more compact and slimmer because of a super mini package. We have various products for such applications as shown below. In addition, we can provide you with reel-style packing (TL) to meet automatic surface mounting requirement.

***For muting circuit and driver applications**
Features *Built-in bias resistances. *Low on-resistance. *High f_T (gain-bandwidth product).
 *Able to make the sets more compact and slimmer because of super mini package. *High h_{FE} .

Type No.	Marking	Absolute Maximum Ratings/ $T_a=25^\circ\text{C}$				Electrical Characteristics/ $T_a=25^\circ\text{C}$									
		V_{CBO} (V)	V_{CEO} (V)	I_C (mA)	P_C (mW)	V_{CE} (V)	I_C (mA)	h_{FE} min	V_{CE} (V)	I_C (mA)	f_T (MHz)	V_{CB} (V)	cob typ (pF)	R_{on} typ (Ω)	Resistan- ce R 1 R 2 (K Ω)
2SA1864	A A	15	15	100	150	2	20	50	5	10	600	10	0.9	5	4.7
2SA1865	B A	15	15	100		2	10	50			600		0.9	6	10
2SA1866	C A	15	15	50		2	5	100			600		0.9	10	47
2SC4920	E A	25	20	100		2	20	80			240		1.4	2.2	4.7
2SC4921	F A	25	20	100		2	10	100			240		1.4	2.8	10
2SC4922	G A	25	20	100		2	5	200			240		1.4	4	47



***FM, RF, MIX, IF amplifier. High-frequency amplifier.**
 *High power gain. *High cutoff frequency. *Low collector to emitter saturation voltage.
 *Able to make the sets more compact and slimmer because of super mini package. *Both PNP and NPN types are available.

Type No.	Marking	Absolute Maximum Ratings/ $T_a=25^\circ\text{C}$				Electrical Characteristics/ $T_a=25^\circ\text{C}$										Related Type No. Chips used
		V_{CBO} (V)	V_{CEO} (V)	I_C (mA)	P_C (mW)	V_{CE} (V)	I_C (mA)	h_{FE}	I_C (mA)	I_B (mA)	$V_{CE(sat)}$ typ max (V)	V_{CE} (V)	I_C (mA)	f_T typ (MHz)	PG typ (dB)	
2SA1863	A 1 ~ 3	15	12	50	150	10	5	60~270	10	1	0.1 0.3	10	5	750	25	2SA1857
2SC4918	A 4 ~ 6	40	18								0.2				28	2SC4400

***High Speed Switching Use.**
 *High switching speed. *Low collector saturation voltage. *High f_T (gain-bandwidth product).
 *Low collector capacitance. *Able to make the sets more compact and slimmer.

Type No.	Marking	Absolute Maximum Ratings/ $T_a=25^\circ\text{C}$				Electrical Characteristics/ $T_a=25^\circ\text{C}$										Related Type No. Chips used
		V_{CBO} (V)	V_{CEO} (V)	I_C (mA)	P_C (mW)	V_{CE} (V)	I_C (mA)	h_{FE}	I_C (mA)	I_B (mA)	$V_{CE(sat)}$ typ max (V)	V_{CE} (V)	I_C (mA)	f_T typ (MHz)	PG typ (dB)	
2SA1883	H A	15	15	200	150	1	10	50~140	10	1	0.07 0.20	1	10	1000	1.8	2SA1763
2SC4987	B 4 ~ 6	40	15	200	150	1	10	50~200	10	1	0.13 0.25	10	10	750	1.4	2SC4452

***VHF~UHF low noise amplifier.**
 *Low noise. *High power gain. *High cutoff frequency. *Makes the sets more compact and slimmer because of super mini package.

Type No.		Absolute Maximum Ratings/ $T_a=25^{\circ}\text{C}$				Electrical Characteristics/ $T_a=25^{\circ}\text{C}$												Related	
		V_{CBO} (V)	V_{CEO} (V)	I_C (mA)	P_C (mW)	V_{CE} (V)	I_C (mA)	h_{FE}	V_{CE} (V)	I_C (mA)	f_T (GHz)	V_{CB} (V)	cob (pF)	V_{CE} (V)	I_C (mA)	$ S_{21e} ^2$ (dB)	NF (dB)	Type No. Chips used	
2SC4930	A 7 ~ 9	16	8	70	100	5	20	60~270	5	20	7	10	0.95	5	20	11	1.1	2SC4863	
2SC4931	B 1 ~ 3			50		5	15		5	15	9		0.7	5	15	13	1.3	2SC4867	

*** h_{FE} classification and indication mark.**

Marking (A1863) (C4918) (C4930) (C4931)	A 1 A 4 A 7 B 1	A 2 A 5 A 8 B 2	A 3 A 6 A 9 B 3
h_{FE}	60 ~ 120	90 ~ 180	135 ~ 270

Marking (C4987)	B 4	B 5	B 6
h_{FE}	50 ~ 100	70 ~ 140	100 ~ 200

Note: The naming of SMCP is different from that of the present series.

***Muting circuit (High h_{FE})**
 *Low output capacitance. *Low collector to emitter saturation voltage. *Low on-resistance.
 *Makes the sets more compact and slimmer because of super mini package.

Type No.		Absolute Maximum Ratings/ $T_a=25^{\circ}\text{C}$				Electrical Characteristics/ $T_a=25^{\circ}\text{C}$										Related	
Marking		V_{CBO}	V_{CEO}	I_{C}	P_{C}	V_{CE}	I_{C}	h_{FE}	I_{C}	I_{B}	$V_{\text{CE(sat)}}$	V_{CB}	Cob	Ron	Type No. Chips used		
		(V)	(V)	(mA)	(mW)	(V)	(mA)		(mA)	(mA)	typ max (mV)	(V)	typ (pF)	typ (Ω)			
2SC4919	D A	25	15	100	150	2	5	800~3200	10	1	14 30	10	1.4	0.9	2SC4851		

Because of new products, please contact Product Planning Department before you require the samples of these transistors. These specifications are subject to change without notice.