

Transistors

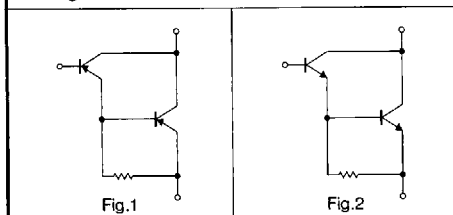
From very small EM3 type package to high power PSD package (the power dissipation is equivalent to TO-220, $P_c=35W$) transistors.

EM3 • UMT • SMT

Three types are available to allow the most suitable package depending on size specifications.

Application	Package			V _{CE0} (V) *V _{CES}	I _c (mA)	P _c (mW) (T _a =25°C)		h _{FE}	Available h _{FE} Ranking code	V _{CE} (V)	I _c (mA)	Circuit
	EM3 (1608)	UMT (2125)	SMT (2916)			EM3	UMT, SMT					
	Part No.											
Low Noise	—	—	2SA1037AKLN	—40	—150	—	200	390~820	E	—6	—1	—
				—50	—150	—	200	180~560	R S	—6	—1	—
	—	—	2SA1455K	—120	—50	—	200	180~820	R S E	—6	—2	—
	—	—	2SC2412KLN	40	150	—	200	390~820	E	6	1	—
				50	150	—	200	180~560	R S	6	1	—
	—	—	2SC3722K	120	50	—	200	180~820	R S E	6	2	—
	2SC4081LN	—	40	100	—	200	180~820	R S E	6	1	—	
Pre Amp	2SA1774	2SA1576A	2SA1037AK	—50	—150	150	200	120~560	Q R S	—6	—1	—
	—	2SA1579	2SA1514K	—120	—50	—	200	180~820	R S E	—6	—2	—
	2SC4617	2SC4081	2SC2412K	50	150	150	200	120~560	Q R S	6	1	—
	—	2SC4102	2SC3906K	120	50	—	200	180~820	R S E	6	2	—
	—	2SC4723	2SC4642K	25	100	—	200	180~560	R S	6	1	—
Driver	—	2SA1577	2SA1036K	—32	—500	—	200	82~390	P Q R	—3	—10	—
	—	—	2SB1051K	—32	—1000	—	200	82~390	P Q R	—3	—100	—
	—	—	2SB1197K	—32	—800	—	200	82~390	P Q R	—3	—100	—
	—	—	2SB1198K	—80	—500	—	200	82~390	P Q R	—3	—100	—
	—	2SC4097	2SC2411K	32	500	—	200	82~390	P Q R	3	10	—
	—	2SD1949	2SD1484K	50	500	—	200	82~390	P Q R	3	100	—
	—	—	2SD1781K	32	800	—	200	82~390	P Q R	3	100	—
	—	—	2SD1782K	80	500	—	200	82~390	P Q R	3	100	—
Low V _{CE(sat)}	—	—	2SD1757K	15	500	—	200	120~560	Q R S	3	100	—
Darlington	—	—	2SB852K	—32*	—300	—	200	5k~	None	—5	—100	Fig.1
	—	—	2SD1383K	32*	300	—	200	5k~	None	5	100	Fig.2
Chroma	—	—	2SC4061K	300	100	—	200	39~180	M N P	10	10	—
High h _{FE} High V _{EBO}	—	—	2SD2114K	20	500	—	200	560~2700	U V W	3	10	—
	—	2SD2351	2SD2226K	50	150	—	200	560~2700	U V W	5	1	—

Darlington transistor internal circuit

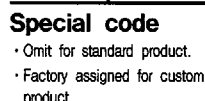


EM3 • UMT • SMT High frequency type

	Application	Package			V _{CEO} (V)	I _c (mA)	f _T (MHz)	C _{ob} (pF)	h _{FE}	Available Type Ranking code	V _{CE} (V)	I _c (mA)
		EM3 (1608)	UMT (2125)	SMT (2916)								
		Part No.										
AM FM VHF UHF	FM IF AM RF	2SA1821	2SA1808	2SA1733K	—20	—30	400	0.85	39~180	M N P	—10	—1
		—	2SC4128	2SC4018K	32	100	230	1.8	56~180	N P	6	2
		2SC4618	2SC4098	2SC2413K	25	50	300	1.3	56~270	N P Q	6	1
	SW	2SC5073	2SC4700	2SC4699K	20*	200	250	2.0	39~180	M N P	5	5
		2SC5072	2SC4912	2SC4911K	20*	200	450	2.5	56~180	N P	5	5
	FM RF Mix. Osc.	2SC4649	2SC4099	2SC2059K	20	20	500	1.4	39~180	M N P	6	1
	Tuner IF	—	2SC4772	2SC4771K	25	50	600	0.95	27~180	L M N P	10	10
	RF SW	2SA1885	2SA1886	—	—10	—100	650	1.2	180~560	R S	—5	—10
		2SC4997	2SC4998	—	10	100	240	1.4	560~2700	U V W	5	10
		—	2SC4773	2SC4326LK	6	50	800	1.1	120~560	Q R S	5	5
—		2SC4774	2SC4713K	6	50	800	1.0	120~560	Q R S	5	5	
TV Tuner Mix. Osc.	—	2SC4103	2SC3802K	25	30	1100	0.8	39~270	M N P Q	10	4	
	2SC4619	2SC4100	2SC3082K	19	50	1100	1.0	39~270	M N P Q	10	5	
	2SC4725	2SC4082	2SC3837K	18	50	1500	0.9	27~270	L M N P Q	10	10	
	—	2SC4084	2SC3839K	20	50	2000	0.8	27~270	L M N P Q	10	5	
	2SC4726	2SC4083	2SC3838K	11	50	3200	0.8	27~270	L M N P Q	10	5	

Note : * 2SC4699K, 2SC4700, 2SC5073/2SC4911K, 2SC4912, 2SC5072 : V_{CES}

- When ordering, specify the type.
- Check each code against the tables shown below.
- Fill a space with the next character.



Package	Code	Packaging style	Packaging style	Direction	Quantity / package (pcs)
EM3	TL	Taping	Embossed reel tape	1 Pin side on sprocket hole side	3,000
	TR			2 Pins side on sprocket hole side	
UMT	T106	Taping	Embossed reel tape	1 Pin side on sprocket hole side	3,000
	T107			2 Pins side on sprocket hole side	
SMT	T146	Taping	Embossed reel tape	1 Pin side on sprocket hole side	3,000
	T147			2 Pins side on sprocket hole side	

(Min., Max. is displayed)

Code	IFF Range
L	27~56
M	39~82
N	56~120
P	82~180
Q	120~270
R	180~390
S	270~560
E	390~820
U	560~1200
V	820~1800
W	1200~2700
A	1k~
B	5k~
C	10k~

Package		EM3	UMT	SMT (SC-59 / Japanese SOT-23)
Dimensions		TOP VIEW (1) Emitter (2) Base (3) Collector	TOP VIEW (1) Emitter (2) Base (3) Collector	TOP VIEW (1) Emitter (2) Base (3) Collector
Actual size				
Enlarged ($\times 3.0$)				

Transistors

EM3 • UMT • SMT

●Packaging Specifications

(Unit : mm)

