

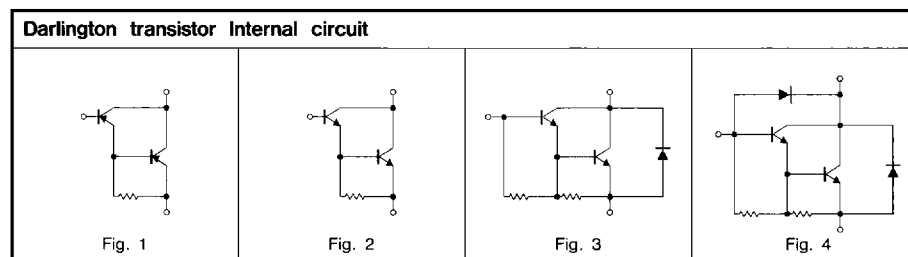
Transistors

ATR • ATV

Approximately the same size as the TO-92 with up to 1 W power capability.
Taped type for automated placement or bulk packaging available.

Application	Package		V _{CEO} (V) *V _{CES} **V _{CER}	I _c (A)	I _c Max. (A)	P _c (mW) (T _a = 25°C)	h _{FE}	Internal circuit		
	ATR	ATV						V _{CE} (V)	I _c (mA)	
	Part No.									
Low Noise	2SA937AMLN	—	-50	-0.15	—	300	180~560	-6	-1	—
	2SC2021MLN	—	40	0.15	—	300	390~820	6	1	—
	—	—	50	0.15	—	300	180~560	6	1	—
Pre Amp	2SA937AM	2SA1547A	-50	-0.15	—	300	82~390	-6	-1	—
	2SC2021M	2SC4010	40	0.15	—	300	390~820	6	1	—
	—	—	50	0.15	—	300	120~560	6	1	—
Driver	2SC4776M	2SC4778	25	0.1	0.2	400	180~560	6	1	—
	2SA874M	2SA1548	-32	-0.5	—	300	82~390	-3	-100	—
	2SB909M	2SB1237	-32	-1	—	1000*	82~390	-3	-100	—
	2SB910M	2SB1238	-80	-0.7	—	1000*	82~390	-3	-100	—
	2SB911M	2SB1240	-32	-2	-3	1000*	82~390	-3	-500	—
	2SB1042M	2SB1241	-80	-1	—	1000*	82~390	-3	-100	—
	2SB1044M	2SB1242	-50	-1	—	1000*	82~390	-3	-100	—
	2SB1066M	2SB1243	-50	-3	—	1000*	56~390	-3	-500	—
	2SB1130AM	2SB1236A	-160	-1.5	-3	1000*	56~270	-5	-100	—
	2SB1130M	2SB1236	-120	-1.5	-3	1000*	56~390	-5	-100	—
	2SC1652M	2SC4016	32	0.5	—	400	82~390	3	100	—
	2SD1225M	2SD1858	32	1	—	1000*	82~390	3	100	—
	2SD1226M	2SD1859	80	0.7	—	1000*	82~390	3	100	—
	2SD1227M	2SD1862	32	2	2.5	1000*	82~390	3	500	—
	2SD1228M	2SD1860	50	0.5	—	600	82~390	3	100	—
	2SD1293M	2SD1863	80	1	2	1000*	82~390	3	500	—
	2SD1507M	2SD1864	50	3	—	1000*	82~390	3	500	—
	2SD1665AM	2SD1857A	160	1.5	3	1000*	56~270	5	100	—
	2SD1665M	2SD1857	120	1.5	3	1000*	56~390	5	100	—
	Storobo Flash	2SB1307M	2SB1326	-20	-5	-10	1000*	82~390	-2	-500
Low V _{CE(sat)}	2SD1962M	2SD2097	20	5	10	1000*	120~560	2	500	—
Low V _{CE(sat)}	2SB1485M	2SB1443	-50	-2	-5	1000*	82~270	-2	-500	—
	2SD1469M	2SD1865	15	1	—	600	120~560	3	100	—
	—	2SD2264	20	3	5	1000*	120~560	2	100	—
—	2SD2197M	2SD2279	50	2	5	1000*	82~270	2	500	—
Chroma	2SC3270M	2SC4015	300	0.1	—	1000*	39~180	10	10	—
High h _{FE}	—	2SB1460	-20	-2	-3	1000*	270~1200	-6	-500	—
High h _{FE}	2SD2145M	2SD2192	20	0.5	1	400	560~2700	3	10	—
High V _{EB0}	2SD2313M	2SD2315	50	0.15	0.2	400	560~2700	5	1	—
Darlington	2SA790M	2SA1549	-32**	-0.3	-1.5	300	5k~	-5	-100	Fig. 1
	2SB1076M	2SB1239	-40**	-2	—	1000*	1k~	-3	-500	Fig. 1
	2SC1545M	2SC4017	32**	0.3	1.5	300	5k~	5	100	Fig. 2
	2SD1536M	2SD1861	40**	2	—	1000*	1k~	3	500	Fig. 2
	2SD1660M	2SD1867	100	2	—	1000*	1k~10k	2	1000	Fig. 3
	2SD1661M	2SD1866	60±10	2	—	1000*	1k~10k	2	1000	Fig. 4
High Voltage	—	2SA1776	-400	-0.5	-1	1000*	82~270	-5	-50	—
SW	2SC4295M	2SC4620	400	0.1	—	1000*	56~270	10	10	—

Note : ★PC board (collector's copper foil area, 1cm² or over ; PC board thickness, 1.7mm)



ATR • ATV High frequency type

Application	Package		V _{CEO} (V)	I _c (mA)	f _t (MHz)	C _{ob} (pF)	h _{FE}	Internal circuit		
	ATR	ATV						V _{CE} (V)	I _c (mA)	
	Part No.									
AM FM	FM IF AM RF	2SC3078M	2SC4012	32	100	230	1.8	56~180	6	2
		2SC2063M	2SC4011	25	50	300	1.6	56~270	6	1
VHF UHF	FM RF Mix. Osc.	2SC3079M	2SC4013	20	20	500	1.4	39~180	6	1
	TV Tuner Mix. Osc.	2SC3080M	2SC4014	19	50	1100	1.2	39~270	10	5

●Product Designation

Specify part No., packaging specification code and h_{FE} ranking code.

Blank unless otherwise required



Part No.

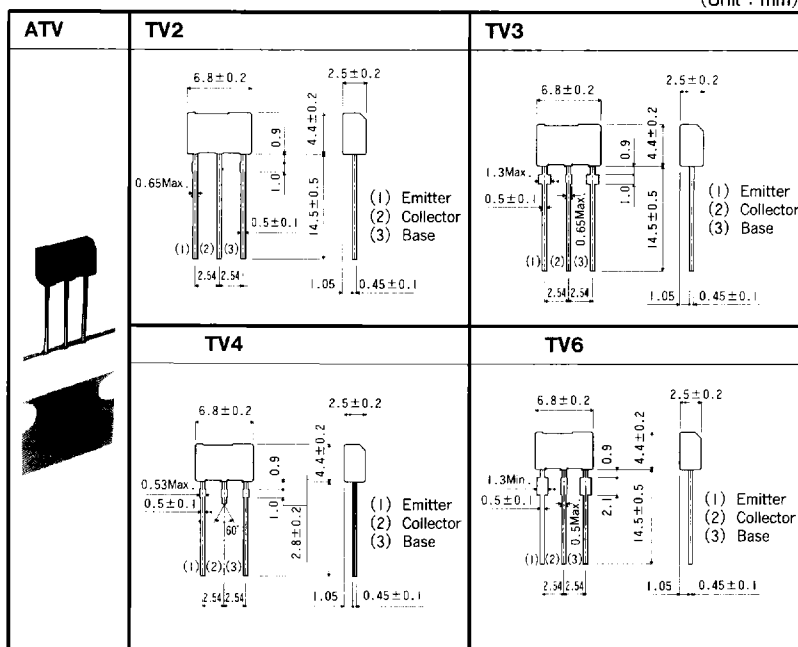
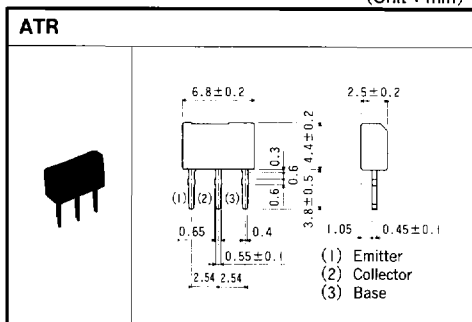
Packaging specification code

h_{FE} Ranking code

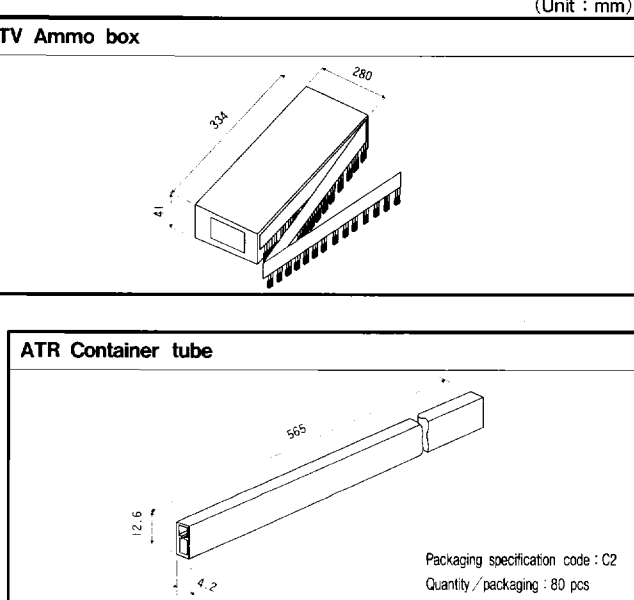
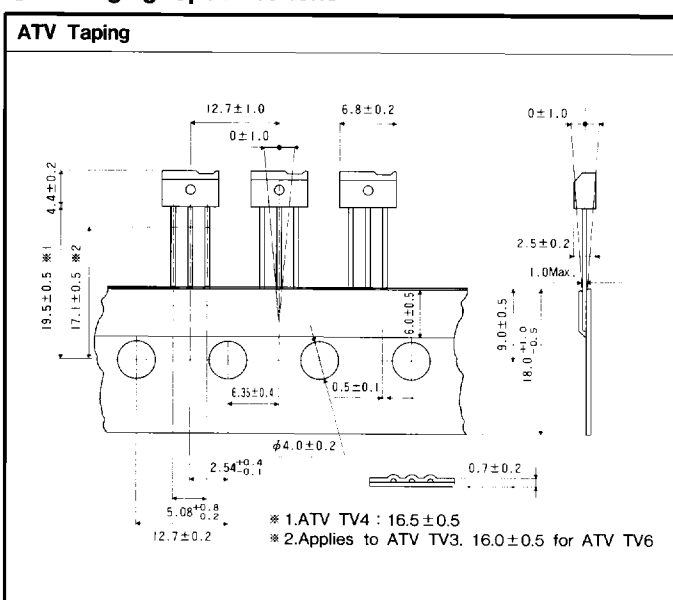
Code	Package	Package specifications	Quantity/Package (pcs)
—	ATR	Bulk	2,000
C2		Tube	8,000 (80pcs×100)
TV2	ATV	Ammo box	2,500
TV3			
TV4			
TV6			

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

(Unit : mm)



●Packaging Specifications



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