

# Digital Transistors

## FTR · FTL · ATR · ATV · SPT





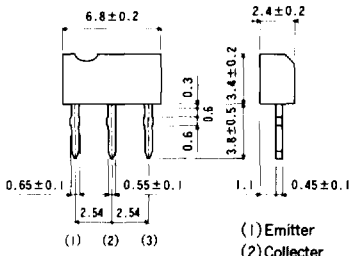
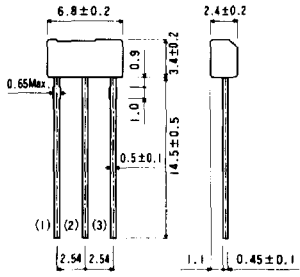
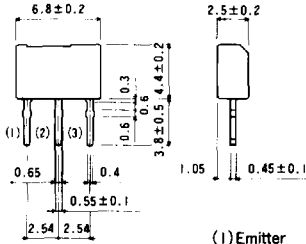
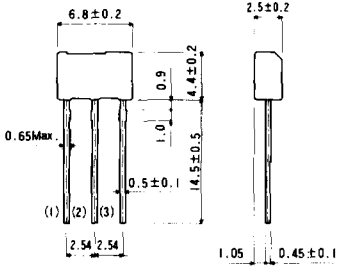

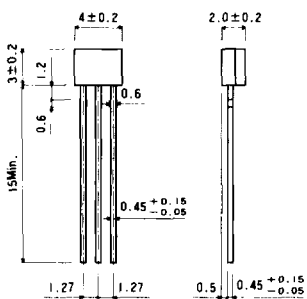
Composite transistors with built-in resistors. In addition to FTR and FTL and ATR and ATV and SPT package variations, internal resistor variations are available for specific applications to meet a wide range of needs.

### ● Product Designation

<b>D</b>	<b>T</b>	<b>A</b>	<b>1</b>	<b>2</b>	<b>4</b>	<b>E</b>		<b>A</b>
Part No.			Package code				Suffix (Except EM3)	
			Package		Code			
			FTR		F			
			FTL		L			
			ATR		A			
			ATV		V			
			SPT		S			

DTA and DTC of 100mA have suffix "A".  
For example, DTA123E of ATR package is expressed as DTA123EAA.

(Unit : mm)

<b>FTR</b>	<b>FTL</b>		
Package code F	Package code L	Package code A	Package code V
			
 <p>(1) Emitter (2) Collector (3) Base</p>	 <p>(1) Emitter (2) Collector (3) Base</p>	 <p>(1) Emitter (2) Collector (3) Base</p>	 <p>(1) Emitter (2) Collector (3) Base</p>
<b>SPT</b>			
Package code S			
			
 <p>(1) Emitter (2) Collector (3) Base</p>			

● 100mA Specifications

PNP Type Fig.1	NPN Type Fig.2	Resistance value		Package					V <sub>CC</sub> (V)	I <sub>O</sub> (mA)	G <sub>I</sub>	V <sub>O</sub> (V)	I <sub>O</sub> (mA)
		R <sub>1</sub> (k $\Omega$ )	R <sub>2</sub> (k $\Omega$ )	FTR	FTL	ATR	ATV	SPT					
Part No.													
Pd = 300mW													
DTA1D3R□A	DTC1D3R□A	2.7	1.0	○	○	○	○	○	50	30	20~	5	30
DTA113Z□A	DTC113Z□A	1.0	10	○	○	○	○	○	50	100	33~	5	5
DTA114E□A	DTC114E□A	10	10	○	○	○	○	○	50	50	30~	5	5
DTA114W□A	DTC114W□A	10	4.7	○	○	○	○	○	50	100	24~	5	10
DTA114Y□A	DTC114Y□A	10	47	○	○	○	○	○	50	70	88~	5	5
DTA115E□A	DTC115E□A	100	100	○	○	○	○	○	50	20	82~	5	5
DTA115U□	DTC115U□	100	10	○	○	○	○	○	50	20	27~	5	5
DTA123E□A	DTC123E□A	2.2	2.2	○	○	○	○	○	50	100	20~	5	20
DTA123J□A	DTC123J□A	2.2	47	○	○	○	○	○	50	100	80~	5	10
DTA123Y□A	DTC123Y□A	2.2	10	○	○	○	○	○	50	100	33~	5	10
DTA124E□A	DTC124E□A	22	22	○	○	○	○	○	50	30	56~	5	5
DTA124X□A	DTC124X□A	22	47	○	○	○	○	○	50	50	88~	5	5
DTA143E□A	DTC143E□A	4.7	4.7	○	○	○	○	○	50	100	20~	5	10
DTA143X□A	DTC143X□A	4.7	10	○	○	○	○	○	50	100	30~	5	10
DTA143Y□A	DTC143Y□A	4.7	22	○	○	○	○	○	50	100	56~	5	5
DTA143Z□A	DTC143Z□A	4.7	47	○	○	○	○	○	50	100	80~	5	10
DTA144E□A	DTC144E□A	47	47	○	○	○	○	○	50	30	88~	5	5
DTA144V□A	DTC144V□A	47	10	○	○	○	○	○	50	70	33~	5	5
DTA144W□A	DTC144W□A	47	22	○	○	○	○	○	50	30	56~	5	5

□ : Package code

F L A V S

PNP Type Fig.3	NPN Type Fig.4	Resistance value R <sub>1</sub> (k $\Omega$ )	V <sub>CE0</sub> (V)	I <sub>C</sub> (mA)	Package					Min.	Typ.	Max.	V <sub>CE</sub> (V)	I <sub>C</sub> (mA)
					FTR	FTL	ATR	ATV	SPT					
Pd = 300mW														
h <sub>FE</sub>														
DTA113T□A	—	1.0	50	100	○	○	○	○	○	100	250	600	5	1
DTA114T□A	DTC114T□A	10	50	100	○	○	○	○	○	100	250	600	5	1
DTA115T□A	DTC115T□A	100	50	100	○	○	○	○	○	100	250	600	5	1
DTA124T□A	DTC124T□A	22	50	100	○	○	○	○	○	100	250	600	5	1
DTA125T□	DTC125T□	200	50	100	○	○	○	○	○	100	250	600	5	1
DTA143T□A	DTC143T□A	4.7	50	100	○	○	○	○	○	100	250	600	5	1
DTA144T□A	DTC144T□A	47	50	100	○	○	○	○	○	100	250	600	5	1

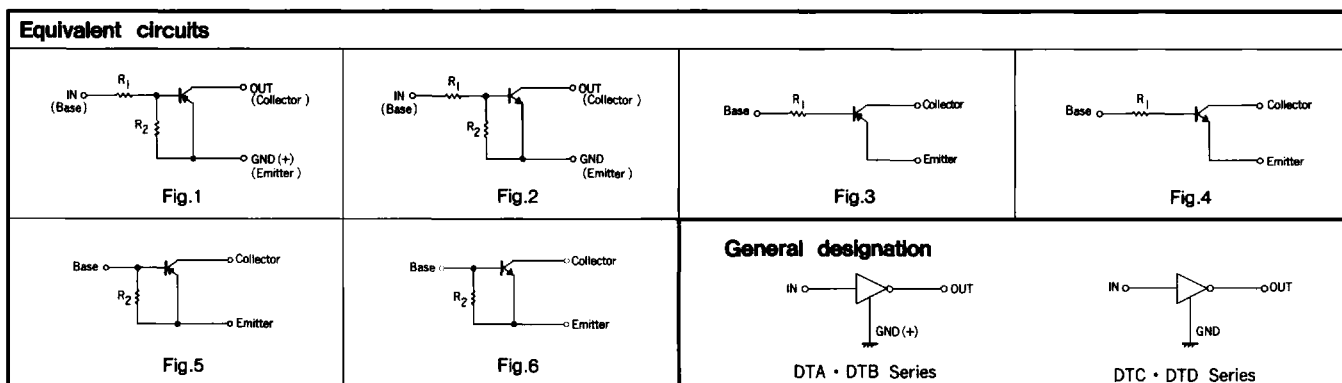
□ : Package code

F L A V S

PNP Type Fig.5	NPN Type Fig.6	B-E Resistance R <sub>2</sub> (k $\Omega$ )	V <sub>CE0</sub> (V)	I <sub>C</sub> (mA)	Package					Min.	V <sub>CE</sub> (V)	I <sub>C</sub> (mA)
					FTR	FTL	ATR	ATV	SPT			
Pd = 300mW												
DTA114G□A	DTC114G□A	10	50	100	○	○	○	○	○	30	5	5
DTA115G□A	DTC115G□A	100	50	100	○	○	○	○	○	82	5	5
DTA124G□A	DTC124G□A	22	50	100	○	○	○	○	○	58	5	5
DTA144G□A	DTC144G□A	47	50	100	○	○	○	○	○	88	5	5

□ : Package code

F L A V S



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For Data and Application Notes, see Standard Products Lists