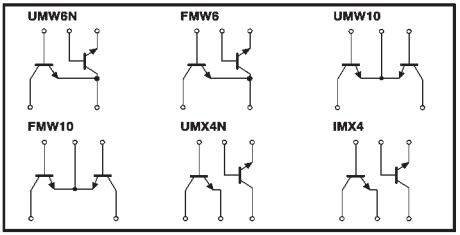
High transition frequency (dual transistors)

UMW6N / UMW10N / UMX4N / FMW6 / FMW10 / IMX4

●Features

1）Two 2SC3837K chips in a UMT or SMT package.
2）High transition frequency.（fT=1.5GHz）
3）Low output capacitance.（Cob=0.95pF）

●Circuit diagrams



●Absolute maximum ratings（Ta=25℃）

Parameter		Symbol	Limits	Unit
Collector-base voltage		VCBO	30	V
Collector-emitter voltage		VCEO	18	V
Emitter-base voltage		VEBO	3	V
Collector current		IC	50	mA
Collector power dissipation	UMW6N, UMW10N, UMX4N	PC	150 (TOTAL)	mW *1
	FMW6, FMW10, IMX4		300 (TOTAL)	*2
Junction temperature		Tj	150	℃
Storage temperature		Tstg	−55～+150	℃

*1 120mW per element must not be exceeded.
*2 200mW per element must not be exceeded.

●Package, marking, and packaging specifications

Part No.	UMW6N	UMW10N	UMX4N	FMW6	FMW10	IMX4
Package	UMT5	UMT6	UMT6	SMT5	SMT6	SMT6
Marking	W6	W10	X4	W6	W10	X4
Code	TR	TR	TR	T148	T148	T108
Basic ordering unit (pieces)	3000	3000	3000	3000	3000	3000

●Electrical characteristics（Ta=25℃）

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Collector-base breakdown voltage	BVCBO	30	—	—	V	IC=10 μA
Collector-emitter breakdown voltage	BVCEO	18	—	—	V	IC=1mA
Emitter-base breakdown voltage	BVEBO	3	—	—	V	IE=10 μA
Collector cutoff current	ICBO	—	—	0.5	μA	VCB=10V
Emitter cutoff current	IEBO	—	—	0.5	μA	VEB=2V
DC current transfer ratio	hFE	27	—	270	—	VCE/IC=10V/10mA
Collector-emitter saturation voltage	VCE(sat)	—	—	0.5	V	IC/IB=20mA/4mA
hFE pairing	hFE1 / hFE2	0.5	1	2	—	VCE/IC=10V/10mA
Transition frequency	fT	600	1500	—	MHz	VCE/IC=10V/10mA , f=200MHz *
Output capacitance	Cob	—	0.95	1.6	pF	VCB/f=10V/1MHz , IE=0A