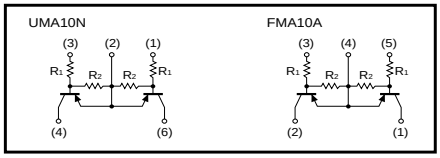
General purpose (dual digital transistors)

UMA10N / FMA10A

●Features

1) Two DTA113Z chips in a UMT package.

●Equivalent circuits



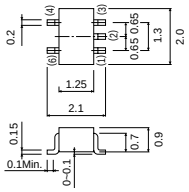
●Absolute maximum ratings (Ta=25°C)

Parameter		Symbol	Limits	Unit
Supply voltage		V_{CC}	−50	V
Input voltage		V_{IN}	−10	V
			5	
Output current		I_O	−100	mA
Power dissipation	UMA10N	Pd	150(TOTAL)	mW ∗1
	FMA10A		300(TOTAL)	∗2
Junction temperature		Tj	150	°C
Storage temperature		Tstg	−50~+150	°C

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

●External dimensions (Units : mm)

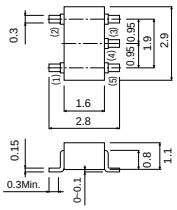
UMA10N



ROHM : UMT5
EIAJ : SC-88A
JEDEC : SOT-353

Each lead has same dimensions

FMA10A



ROHM : SMT5
EIAJ : SC-74A

Each lead has same dimensions

●Package, marking, and packaging specifications

Part No.	UMA10N	FMA10A
Package	UMT5	SMT5
Marking	A10	A10
Code	TR	T148
Basic ordering unit (pieces)	3000	3000

●Electrical characteristics (Ta=25°C)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Input voltage	$V_{I(off)}$	–	–	−0.3	V	V_{CC}=−5V , I_O=−100μA
	$V_{I(on)}$	−3.0	–	–		V_O=−0.3V , I_O=−20mA
Output voltage	$V_{O(on)}$	–	−0.1	−0.3	V	I_O/I_C=−10mA/−0.5mA
Input current	I_I	–	–	−7.2	mA	V_I=−5V
Output current	$I_{O(off)}$	–	–	−0.5	μA	V_{CC}=−50V , V_I=0V
DC current gain	G_I	33	–	–	–	V_O=−5V , I_O=−5mA
Input resistance	R_1	0.7	1.0	1.3	kΩ	–
Resistance ratio	R_2/R_1	8	10	12	–	–
Transition frequency	f_T	–	250	–	MHz	V_{CC}=−10V , I_E=5mA, f=100MHz ∗

∗ Transition frequency of the device.