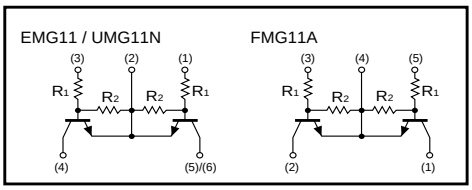
Emitter common (dual digital transistors)

EMG11 / UMG11N / FMG11A

●Features

1) Two DTA123Js chips in a EMT or UMT or SMT package.

●Equivalent circuit



●Package, marking, and packaging specifications

Type	EMG11	UMG11N	FMG11A
Package	EMT5	UMT5	SMT5
Marking	G11	G11	G11
Code	T2R	TR	T148
Basic ordering unit (pieces)	8000	3000	3000

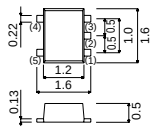
●Absolute maximum ratings (Ta = 25°C)

Parameter	Symbol	Limits	Unit
Supply voltage	V_{CC}	50	V
Input voltage	V_{IN}	12	V
		5	
Output current	I_O	100	mA
Power dissipation	Pd	150(TOTAL)	mW ∗1
		300(TOTAL)	∗2
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)

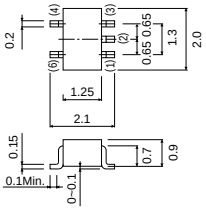
EMG11



Each lead has same dimensions

ROHM : EMT5

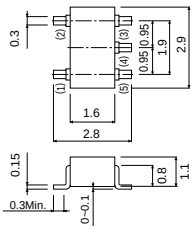
UMG11N



Each lead has same dimensions

ROHM : UMT5
EIAJ : SC-88A

FMG11A



Each lead has same dimensions

ROHM : SMT5
EIAJ : SC-74A

●Electrical characteristics (Ta = 25°C)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Input voltage	$V_{I\,(off)}$	–	–	0.5	V	V_{CC}=5V, I_O=100μA
	$V_{I\,(on)}$	1.1	–	–		V_O=0.3V, I_O=5mA
Output voltage	$V_{O\,(on)}$	–	0.1	0.3	V	I_O=5mA, I_I=0.25mA
Input current	I_I	–	–	3.6	mA	V_I=5V
Output current	$I_{O\,(off)}$	–	–	0.5	μA	V_{CC}=50V, V_I=0V
DC current gain	G_I	80	–	–	–	I_O=10mA, V_O=5V
Input resistance	R_1	–	2.2	–	kΩ	–
Transition frequency	f_T	–	250	–	MHz	V_{CE}=10V, I_E=−5mA, f=100MHz ∗
Resistance ratio	R_2 / R_1	17	21	26	–	–

∗Transition frequency of the device.