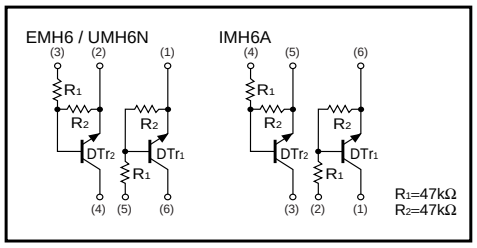
General purpose (dual digital transistors)

EMH6 / UMH6N / IMH6A

●Features

1) Two DTC144E chips in a EMT or UMT or SMT package.

●Equivalent circuit



●Package, marking, and packaging specifications

Type	EMH6	UMH6N	IMH6A
Package	EMT6	UMT6	SMT6
Marking	H6	H6	H6
Code	T2R	TR	T108
Basic ordering unit (pieces)	8000	3000	3000

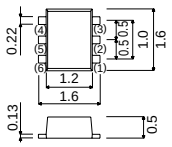
●Absolute maximum ratings (Ta = 25°C)

Parameter		Symbol	Limits	Unit
Supply voltage		V_{CC}	50	V
Input voltage		V_{IN}	40	V
			−10	
Output current		I_O	30	mA
COLLECTOR CURRENT		$I_{C(MAX)}$	100	mA
Power dissipation	EMH6 / UMH6N	Pd	150(TOTAL)	mW ∗1
	IMH6A		300(TOTAL)	∗2
Junction temperature		Tj	150	°C
Storage temperature		Tstg	−55 to +150	°C

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

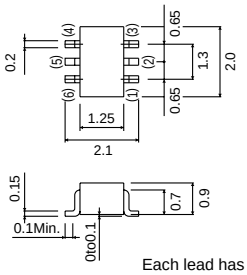
●External dimensions (Unit : mm)

EMH6



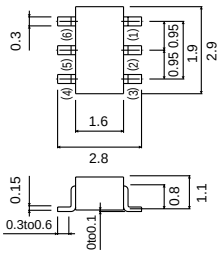
ROHM : EMT6 Each lead has same dimensions

UMH6N



ROHM : UMT6 Each lead has same dimensions
EIAJ : SC-88

IMH6A



ROHM : SMT6 Each lead has same dimensions
EIAJ : SC-74

●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
	$V_{I\ (on)}$	3	–	–		V_O=0.3V, I_O=2mA
Output voltage	$V_{O\ (on)}$	–	0.1	0.3	V	I_O/I_I=10mA/0.5mA
Input current	I_I	–	–	0.18	mA	V_I=5V
Output current	$I_{O\ (off)}$	–	–	0.5	μA	V_{CC}=50V, V_I=0V
DC current gain	G_I	68	–	–	–	I_O/V_O=5mA/5V
Input resistance	R_1	32.9	47	61.1	kΩ	–
Resistance ratio	R_2 / R_1	0.8	1	1.2	–	–
Transition frequency	f_T	–	250	–	MHz	V_{CE}=10V, I_E=−5mA, f=100MHz ∗

∗Transition frequency of the device.

●**Electrical characteristics curves**

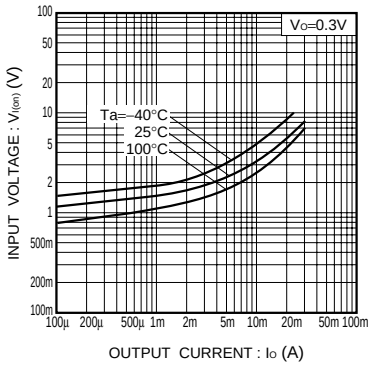


Fig.1 Input voltage vs. output current (ON characteristics)

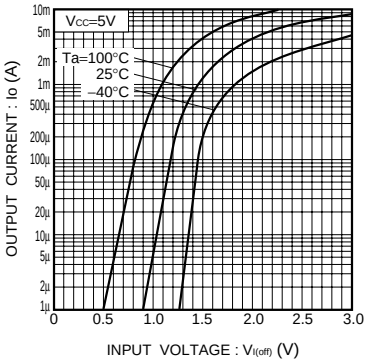


Fig.2 Output current vs. input voltage (OFF characteristics)

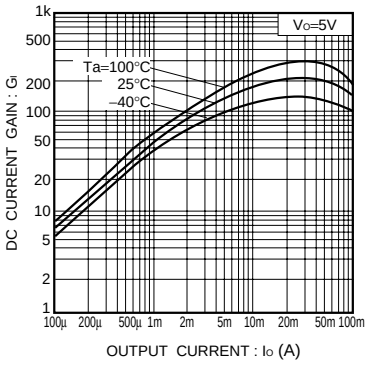


Fig.3 DC current gain vs. output current

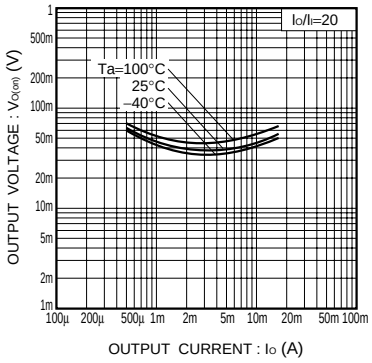


Fig.4 Output voltage vs. output current

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