

EMB6 / UMB6N

Transistors

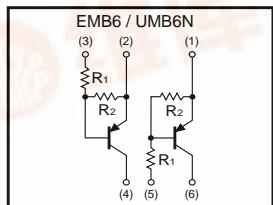
General purpose (dual digital transistors)

EMB6 / UMB6N

●Feature

1) Two DTA144E chips in a EMT or UMT package.

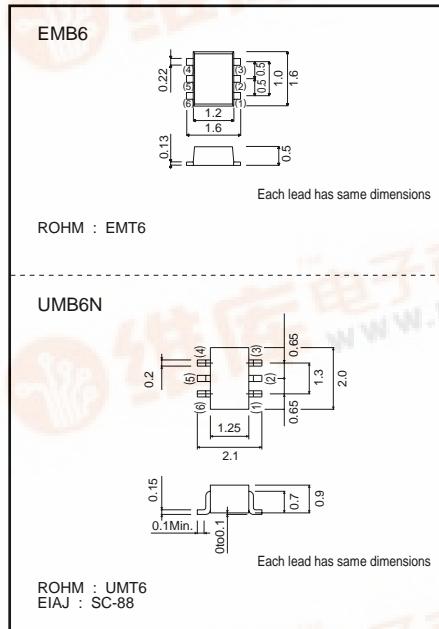
●Equivalent circuit



●Package, marking, and packaging specifications

Type	EMB6	UMB6N
Package	EMT6	UMT6
Marking	B6	B6
Code	T2R	TR
Basic ordering unit (pieces)	8000	3000

●External dimensions (Units : mm)

●Absolute maximum ratings ($T_a=25^\circ C$)

Parameter	Symbol	Limits	Unit
Supply voltage	V_{CC}	-50	V
Input voltage	V_{IN}	-40 10	V
Output current	I_O	50	mA
Power dissipation	P_d	150(TOTAL)	mW *1
Junction temperature	T_j	150	°C
Storage temperature	T_{STG}	-55~+150	°C

*1 120mW per element must not be exceeded.

●Electrical characteristics ($T_a=25^\circ C$)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Input voltage	V_I (off)	—	—	-0.5	V	$V_{CC}=-5V, I_O=-100\mu A$
	V_I (on)	-3.0	—	—		$V_O=-0.3V, I_O=-2mA$
Output voltage	V_O (on)	—	-0.1	-0.3	V	$I_O=-10mA, I_L=-0.5mA$
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	—	—		$I_O=-5mA, V_O=-5V$
Input resistance	R_I	32.9	47	61.1	kΩ	—
Resistance ratio	R_2/R_1	0.8	1.0	1.2	—	—
Transition frequency	f_T	—	250	—	MHz	$V_{CE}=-10V, I_E=5mA, f=100MHz$ *

* Transition frequency of the device.