

Digital Transistors (built-in resistors)

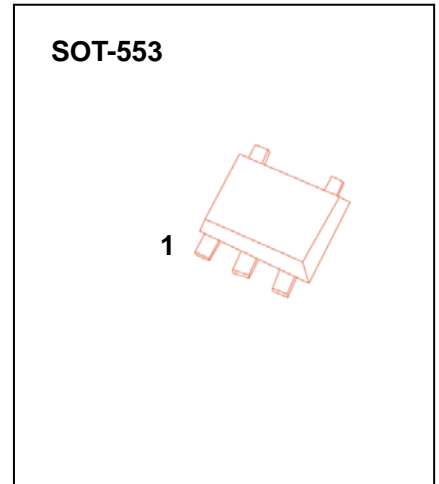
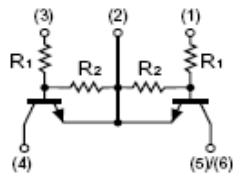
EMG11 dual digital transistors (NPN+NPN)

FEATURES

Two DTC123JCA chips in a package

Marking: G11

Equivalent circuit:



Absolute maximum ratings (T_a=25°C)

Symbol	Parameter	Value	Units
V _{CC}	Supply Voltage	50	V
V _i	Input voltage	-5~12	V
I _o	Output current	100	mA
P _D	Power dissipation	150	mW
T _J	Junction temperature	150	°C
T _{stg}	Storage temperature	-55~+150	°C

Electrical Characteristics (T_a=25°C)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Input turn-on voltage	V _{i(on)}	V _{CC} =0.3V, I _o =5mA			1.1	V
Input cut-off voltage	V _{i(off)}	V _{CC} =5V, I _o =100μA	0.5			V
Output voltage	V _{O(on)}	I _o =5mA, I _i =0.25mA			0.3	V
Input cut-off current	I _i	V _i =5V			3.6	mA
Output cut-off current	I _{O(off)}	V _{CC} =50V, V _i =0			0.5	μA
DC current gain	G _i	V _O =5V, I _o =10mA	80			
Transition frequency	f _T	V _{CE} =10V, I _C =5mA, f=100MHz		250		MHz
Input resistance	R ₁			2.2		KΩ
Resistance ratio	R ₂ /R ₁		17		26	