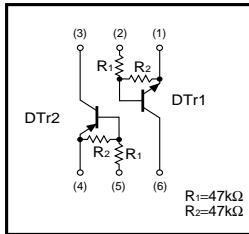


EMD12 / UMD12N

●Features

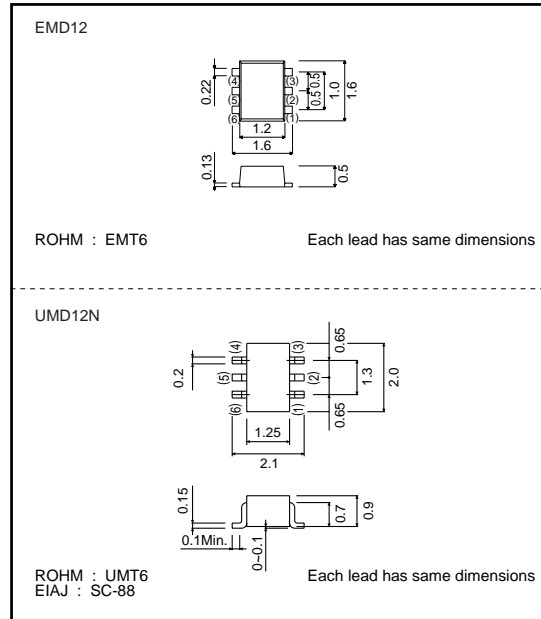
1) Both the DTA144E and DTC144E in a EMT or UMT package.

●Equivalent circuit



●Package, marking, and packaging specifications

Type	EMD12	UMD12N
Package	EMT6	UMT6
Marking	D12	D12
Code	T2R	TR
Basic ordering unit (pieces)	8000	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 _C	100	mA
	I _O	30	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.
PNP type negative symbols have been omitted

●External dimensions (Units : mm)

●Electrical characteristics (Ta=25°C)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Input voltage	V _{I (off)}	-	-	0.5	V	V _{CC} =5/-5V, I _O =100/-100μA
	V _{I (on)}	3	-	-	V	V _O =0.3/-0.3V, I _O =2/-2mA
Output voltage	V _{O (on)}	-	0.1	0.3	V	I _O =10/-10mA, I _I =0.5/-0.5mA
Input current	I _I	-	-	0.18	mA	V _I =5/-5V
Output current	I _{O (off)}	-	-	0.5	μA	V _{CC} =50/-50V, V _I =0V
DC current gain	G _I	68	-	-	-	I _O =5/-5mA, V _O =5/-5V
Transition frequency	f _T	-	250	-	MHz	V _{CE} =10/-10V, I _E =-5/5mA, f=100MHz *
Input resistance	R ₁	32.9	47	61.1	kΩ	-
Resistance ratio	R ₂ / R ₁	0.8	1	1.2	-	-

*Transition frequency of the device. PNP type negative symbols have been omitted