Elektronische Bauelemente

UMH13N

Dual NPN+PNP Digital Transistors (Built-in Resistors)

RoHS Compliant Product
A suffix of "-C" specifies halogen & lead-free

FEATURES

- Two DTC144T chips in a package.

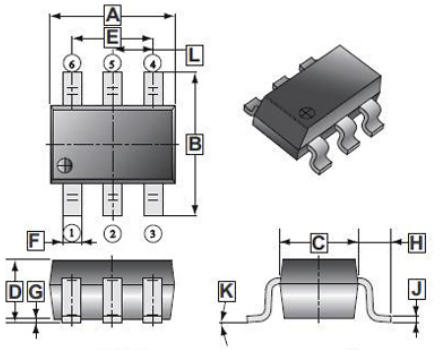
MARKING

H13

PACKAGE INFORMATION

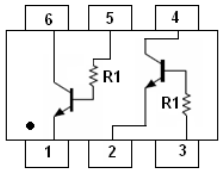
Package	MPQ	Leader Size
SOT-363	3K	7 inch

SOT-363



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	2.00	2.20	G	0.100 REF.	
B	2.15	2.45	H	0.525 REF.	
C	1.15	1.35	J	0.08	0.15
D	0.90	1.10	K	8°	
E	1.20	1.40	L	0.650 TYP.	
F	0.15	0.35			

Top View



ABSOLUTE MAXIMUM RATINGS (T_A=25℃ unless otherwise specified)

Parameter	Symbol	Value	Unit
Collector-base voltage	V_{CBO}	50	V
Collector-emitter voltage	V_{CEO}	50	V
Emitter-base voltage	V_{EBO}	5	V
Collector current	I_C	100	mA
Power dissipation	P_D	150	mW
Junction & Storage temperature	T_J, T_{STG}	150, -55 ~ 150	℃

ELECTRICAL CHARACTERISTICS (T_A=25℃ unless otherwise specified)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Conditions
Collector-base breakdown voltage	$V_{(BR)CBO}$	50	-	-	V	I_C=50μA, I_E=0
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	50	-	-		I_C=1mA, I_B=0
Emitter-base breakdown voltage	$V_{(BR)EBO}$	5	-	-	V	I_E=50μA, I_C=0
Collector cut-off current	I_{CBO}	-	-	0.5	μA	V_{CB}=50V, I_E=0
Emitter cut-off current	I_{EBO}	-	-	0.5	μA	V_{EB}=4V, I_C=0
Collector-emitter saturation voltage	$V_{CE(sat)}$	-	-	0.3	V	I_C=5mA, I_B=0.5mA
DC current transfer ratio	h_{FE}	100	-	600		V_{CE}=5V, I_C=1mA
Input resistance	R_1	32.9	-	61.1	KΩ	
Transition frequency	f_T	-	250	-	MHz	V_{CE}=10V, I_C=5mA, f=100MHz