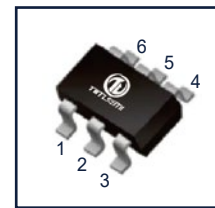
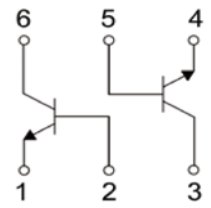


Features

- 2SA1037AK and 2SC2412K are housed independently in a package
- Transistor elements independent, eliminating interference
- Mounting cost and area can be cut in half



SOT-363



Equivalent Circuit

TR1 MAXIMUM RATINGS($T_A=25^{\circ}\text{C}$)

Symbol	Parameter	Value	Uniat
V_{CB0}	Collector-Base Voltage	60	V
V_{CE0}	Collector-Emitter Voltage	50	V
V_{EB0}	Emitter-Base Voltage	7	V
I_c	Collector Current	0.15	A
P_c	Collector Power Dissipation	0.15	W
T_j, T_{stg}	Operation Junction And Storage Temperature Range	$-55 \sim +150$	$^{\circ}\text{C}$

TR2 MAXIMUM RATINGS($T_A=25^{\circ}\text{C}$)

Symbol	Parameter	Value	Uniat
V_{CB0}	Collector-Base Voltage	-60	V
V_{CE0}	Collector-Emitter Voltage	-50	V
V_{EB0}	Emitter-Base Voltage	-6	V
I_c	Collector Current	-0.15	A
P_c	Collector Power Dissipation	0.15	W
T_j, T_{stg}	Operation Junction And Storage Temperature Range	$-55 \sim +150$	$^{\circ}\text{C}$

Ordering information

Product ID	Pack	Naming rule	Marking	Qty(PCS)
UMZ1N	SOT-363	UMZ1N 产品名称 product name	Z1	3000

TR1 NPN ELECTRICAL CHARACTERISTICS

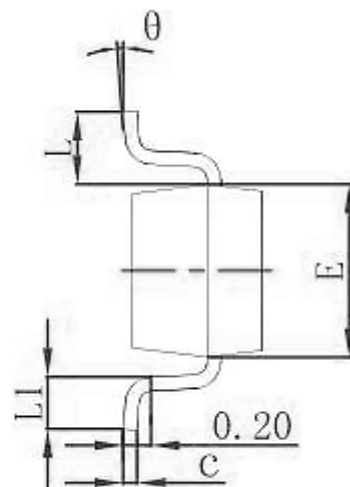
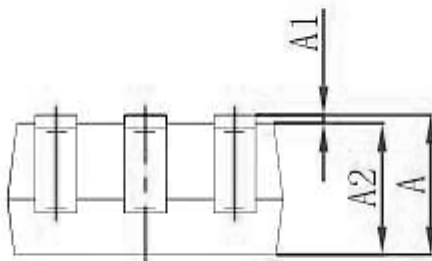
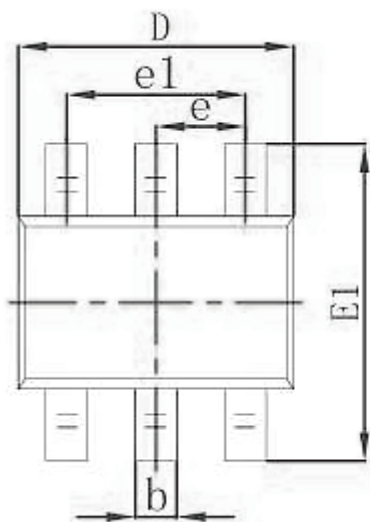
Symbol	Parameter	Test conditions	Min	Typ	Max	Unit
$V_{(BR)CBO}$	Collector-base breakdown voltage	$I_C=50\mu A, I_E=0$	60			V
$V_{(BR)CEO}$	Collector-emitter breakdown voltage	$I_C=1mA, I_B=0$	50			V
$V_{(BR)EBO}$	Emitter-base breakdown voltage	$I_E=50\mu A, I_C=0$	7			V
I_{CBO}	Collector cut-off current	$V_{CB}=60V, I_E=0$			0.1	μA
I_{EBO}	Emitter cut-off current	$V_{EB}=7V, I_C=0$			0.1	μA
h_{FE}	DC current gain	$V_{CE}=6V, I_C=1mA$	120		560	
$V_{CE(sat)}$	Collector-emitter saturation voltage	$I_C=50mA, I_B=5mA$			0.4	V
f_T	Transition frequency	$V_{CE}=12V, I_C=2mA, f=100MHz$		180		MHz
C_{ob}	Collector output capacitance	$V_{CB}=12V, I_E=0A, f=1MHz$		2.0	3.5	pF

TR1 PNP ELECTRICAL CHARACTERISTICS

Symbol	Parameter	Test conditions	Min	Typ	Max	Unit
$V_{(BR)CBO}$	Collector-base breakdown voltage	$I_C=-50\mu A, I_E=0$	-60			V
$V_{(BR)CEO}$	Collector-emitter breakdown voltage	$I_C=-1mA, I_B=0$	-50			V
$V_{(BR)EBO}$	Emitter-base breakdown voltage	$I_E=-50\mu A, I_C=0$	-6			V
I_{CBO}	Collector cut-off current	$V_{CB}=-60V, I_E=0$			-0.1	μA
I_{EBO}	Emitter cut-off current	$V_{EB}=-6V, I_C=0$			-0.1	μA
h_{FE}	DC current gain	$V_{CE}=-6V, I_C=-1mA$	120		560	
$V_{CE(sat)}$	Collector-emitter saturation voltage	$I_C=-50mA, I_B=-5mA$			-0.5	V
f_T	Transition frequency	$V_{CE}=-12V, I_C=-2mA, f=100MHz$		140		MHz
C_{ob}	Collector output capacitance	$V_{CB}=-12V, I_E=0A, f=1MHz$			5	pF



SOT-363 Package Outline Dimensions



Symbol	Dimensions in Millimeters		Dimensions in Inches	
	Min	Max	Min	Max
A	0.900	1.100	0.035	0.043
A1	0.000	0.100	0.000	0.004
A2	0.900	1.000	0.035	0.039
b	0.150	0.350	0.006	0.014
c	0.100	0.150	0.004	0.006
D	2.000	2.200	0.079	0.087
E	1.150	1.350	0.045	0.053
E1	2.150	2.450	0.085	0.096
e	0.650 TYP		0.026 TYP	
e1	1.200	1.400	0.047	0.055
L	0.525 REF		0.021 REF	
L1	0.260	0.460	0.010	0.018
θ	0°	8°	0°	8°