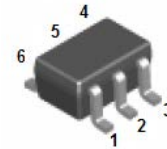
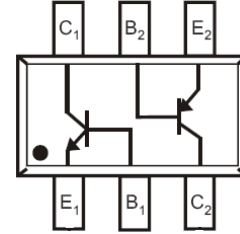




FEATURES

- Both a 2SA1037AK chip and 2SC2412K chip in SOT-363 package
- Mounting cost and area can be cut in half
- Transistor elements are independent, eliminating interference



SOT-363

APPLICATIONS

- NPN/PNP epitaxial planar silicon transistor

ORDERING INFORMATION

Type No.	Marking	Package Code
UMZ1N	Z1	SOT-363

MAXIMUM RATING @ Ta=25°C unless otherwise specified

Symbol	Parameter	Value		Unit
		T _{r1}	T _{r2}	
V _{CBO}	Collector-Base Voltage	60	-60	V
V _{CEO}	Collector-Emitter Voltage	50	-50	V
V _{EBO}	Emitter-Base Voltage	7	-6	V
I _C	Collector Current	150	-150	mA
P _c	Power Dissipation	150		mW
T _J , T _{STG}	Junction and Storage Temperature	-55 to +150		°C



ELECTRICAL CHARACTERISTICS TR1 Section @ Ta=25°C unless otherwise specified

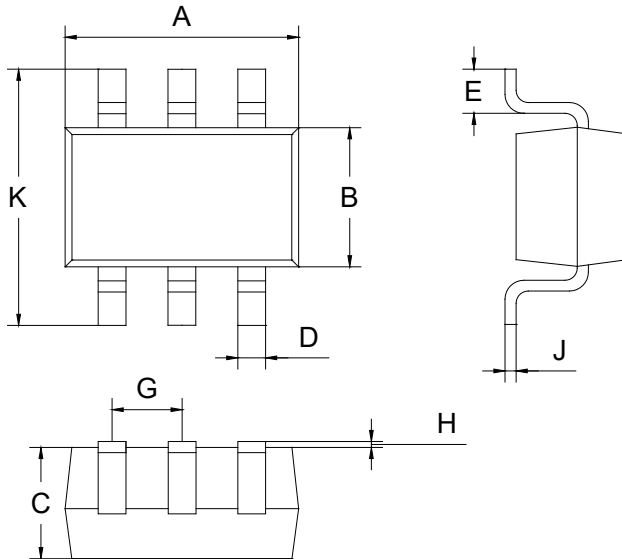
Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C=50\mu A$ $I_E=0$	60			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C=1mA$ $I_B=0$	50			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E=50\mu A$ $I_C=0$	7			V
Collector cut-off current	I_{CBO}	$V_{CB}=60V$ $I_E=0$			0.1	μA
Emitter cut-off current	I_{EBO}	$V_{EB}=7V$ $I_C=0$			0.1	μA
DC current transfer ratio	h_{FE}	$V_{CE}=6V$ $I_C=1.0mA$	120		560	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=50mA$ $I_B=5mA$			0.4	V
Transition frequency	f_T	$V_{CE}=12V$ $I_E=2mA$ $f=100MHz$		180		MHz
Output Capacitance	C_{ob}	$V_{CB}=12V, f=1.0MHz, I_E=0A$		2	3.5	pF

ELECTRICAL CHARACTERISTICS TR2 Section @ Ta=25°C unless otherwise specified

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C=-50\mu A$ $I_E=0$	-60			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C=-1.0mA$ $I_B=0$	-50			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E=-50\mu A$ $I_C=0$	-6			V
Collector cut-off current	I_{CBO}	$V_{CB}=-60V$ $I_E=0$			-0.1	μA
Emitter cut-off current	I_{EBO}	$V_{EB}=-6V$ $I_C=0$			-0.1	μA
DC current transfer ratio	h_{FE}	$V_{CE}=-6V$ $I_C=-1.0mA$	120		560	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=-50mA$ $I_B=-5.0mA$			-0.5	V
Transition frequency	f_T	$V_{CE}=-12V$ $I_E=2mA$ $f=100MHz$		140		MHz
Output Capacitance	C_{ob}	$V_{CB}=-12V, f=1.0MHz, I_E=0A$		4	5	pF
Noise Figure	NF	$V_{CE}=-5V$ $I_C=-200\mu A$ $f=1.0KHz$	-		8.0	dB

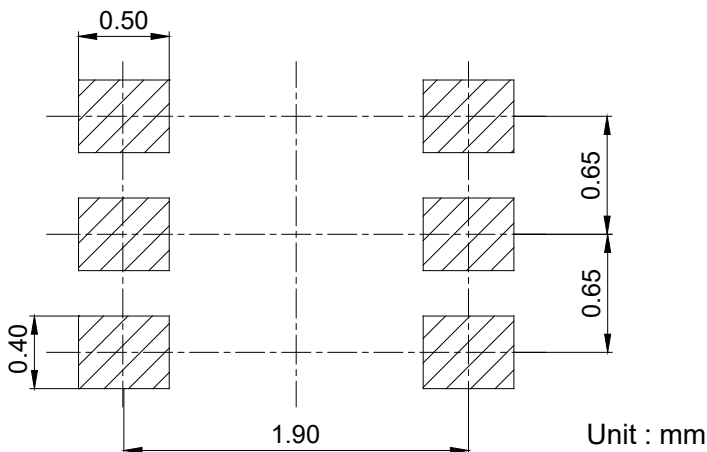
PACKAGE OUTLINE

Plastic surface mounted package



SOT-363		
Dim	Min	Max
A	2.00	2.20
B	1.15	1.35
C	0.85	1.05
D	0.15	0.35
E	0.25	0.40
G	0.60	0.70
H	0.02	0.10
J	0.05	0.15
K	2.20	2.40
All Dimensions in mm		

SOLDERING FOOTPRINT



PACKAGE INFORMATION

Device	Package	Shipping
UMZ1N	SOT-363	3000/Tape&Reel