



## IMZ2A

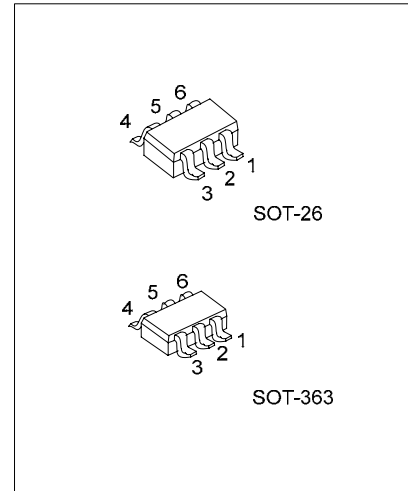
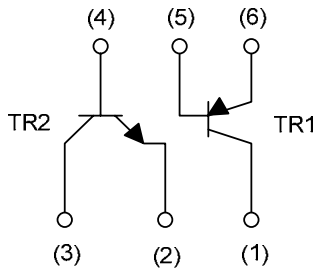
## DUAL TRANSISTOR

### POWER MANAGEMENT (DUAL TRANSISTOR)

#### ■ FEATURES

\* Both a 2SA1037AK chip and 2SC2412K chip in a SMT package.

#### ■ EQUIVALENT CIRCUITS



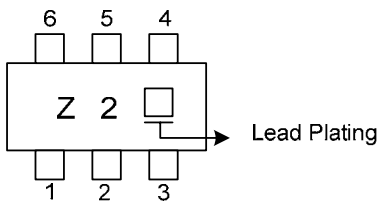
\*Pb-free plating product number: IMZ2AL

#### ■ ORDERING INFORMATION

Ordering Number		Package	Pin Assignment						Packing
Normal	Lead Free Plating		1	2	3	4	5	6	
IMZ2A-AG6-R	IMZ2AL-AG6-R	SOT-26	C1	E2	C2	B2	B1	E1	Tape Reel
IMZ2A-AL6-R	IMZ2AL-AL6-R	SOT-363	C1	E2	C2	B2	B1	E1	Tape Reel

<p>IMZ2AL-AG6-R</p> <p>(1) Packing Type</p> <p>(2) Package Type</p> <p>(3) Lead Plating</p>	<p>(1) R: Tape Reel</p> <p>(2) AG6: SOT-26, AL6: SOT-363</p> <p>(3) L: Lead Free Plating, Blank: Pb/Sn</p>
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#### ■ MARKING



### ■ ABSOLUTE MAXIMUM RATINGS (Ta=25 )

PARAMETER	SYMBOL	LIMITS		UNIT
		TR1	TR2	
Collector-Base Voltage	$V_{CBO}$	-60	60	V
Collector-Emitter Voltage	$V_{CEO}$	-50	50	V
Emitter-Base Voltage	$V_{EBO}$	-6	7	V
Collector Current	$I_C$	-150	150	mA
Collector Power Dissipation (Total)	$P_C$	300 (Note 1)		mW
Junction Temperature	$T_J$	150		°C
Storage Temperature	$T_{STG}$	-55~+150		°C

Note: 1. 200mW per element must not be exceeded.

2. Absolute maximum ratings are those values beyond which the device could be permanently damaged.

Absolute maximum ratings are stress ratings only and functional device operation is not implied.

### ■ ELECTRICAL CHARACTERISTICS (Ta=25 )

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
<b>TR1</b>						
Collector-Base Breakdown Voltage	$BV_{CBO}$	$I_C = -50\mu A$	-60			V
Collector-Emitter Breakdown Voltage	$BV_{CEO}$	$I_C = -1mA$	-50			V
Emitter-Base Breakdown Voltage	$BV_{EBO}$	$I_E = -50\mu A$	-6			V
Collector Cut-Off Current	$I_{CBO}$	$V_{CB} = -60V$			-0.1	$\mu A$
Emitter Cut-Off Current	$I_{EBO}$	$V_{EB} = -6V$			-0.1	$\mu A$
Collector-Emitter Saturation Voltage	$V_{CE(SAT)}$	$I_C / I_B = -50mA/-5mA$			-0.5	V
DC Current Transfer Ratio	$h_{FE}$	$V_{CE} = -6V, I_C = -1mA$	120		560	-
Transition Frequency	$f_T$	$V_{CE} = -12V, I_E = 2mA, f = 100MHz$ (Note)		140		MHz
Output Capacitance	$C_{ob}$	$V_{CB} = -12V, I_E = 0A, f = 1MHz$		4	5	pF
<b>TR2</b>						
Collector-Base Breakdown Voltage	$BV_{CBO}$	$I_C = 50\mu A$	60			V
Collector-Emitter Breakdown Voltage	$BV_{CEO}$	$I_C = 1mA$	50			V
Emitter-Base Breakdown Voltage	$BV_{EBO}$	$I_E = 50\mu A$	7			V
Collector Cut-Off Current	$I_{CBO}$	$V_{CB} = 60V$			0.1	$\mu A$
Emitter Cut-Off Current	$I_{EBO}$	$V_{EB} = 7V$			0.1	$\mu A$
Collector-Emitter Saturation Voltage	$V_{CE(SAT)}$	$I_C / I_B = 50mA/5mA$			0.4	V
DC Current Transfer Ratio	$h_{FE}$	$V_{CE} = 6V, I_C = 1mA$	120		560	
Transition Frequency	$f_T$	$V_{CE} = 12V, I_E = -2mA, f = 100MHz$ (Note)		180	-	MHz
Output Capacitance	$C_{ob}$	$V_{CB} = 12V, I_E = 0A, f = 1MHz$		2	3.5	pF

Note: Transition frequency of the device.

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