



IMZ2A

DUAL TRANSISTOR

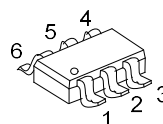
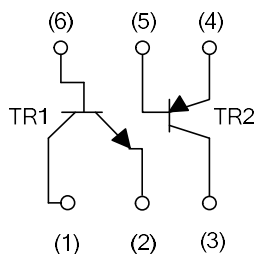
POWER MANAGEMENT (DUAL TRANSISTOR)

■ FEATURES

* Both the 2SA1774 chip and 2SC4617 chip in a SOT-26 and SOT-363 package.

* NPN/PNP silicon transistor(Built-in resistor type)

■ EQUIVALENT CIRCUITS



SOT-26

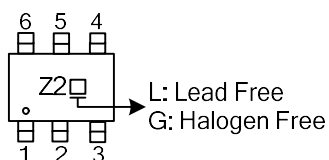
■ ORDERING INFORMATION

Ordering Number		Package	Pin Assignment						Packing
Lead Free	Halogen Free		1	2	3	4	5	6	
IMZ2AL-AG6-R	IMZ2AG-AG6-R	SOT-26	C1	E1	C2	E2	B2	B1	Tape Reel

Note: Pin Assignment: B: Base C: Collector E: Emitter

IMZ2AG-AG6-R (1) Packing Type (2) Package Type (3) Green Package		(1) R: Tape Reel (2) AG6: SOT-26 (3) G: Halogen Free and Lead Free, L: Lead Free
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■ MARKING



■ **ABSOLUTE MAXIMUM RATINGS** ($T_A = 25^\circ\text{C}$, unless otherwise specified)

PARAMETER		SYMBOL	RATINGS	UNIT
Collector-Base Voltage	TR1	V_{CBO}	60	V
	TR2		-60	V
Collector-Emitter Voltage	TR1	V_{CEO}	50	V
	TR2		-50	V
Emitter-Base Voltage	TR1	V_{EBO}	7	V
	TR2		-6	V
Collector Current	TR1	I_C	150	mA
	TR2		-150	mA
Collector Power Dissipation (Total)		P_C	300 (Note2)	mW
Junction Temperature		T_J	+150	$^\circ\text{C}$
Storage Temperature		T_{STG}	-55 ~ +150	$^\circ\text{C}$

Notes: 1. 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.

2. 200mW per element must not be exceeded.

■ **ELECTRICAL CHARACTERISTICS** ($T_A = 25^\circ\text{C}$, unless otherwise specified)

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

Note: Transition frequency of the device.

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