



# IMZ2A

## DUAL TRANSISTOR

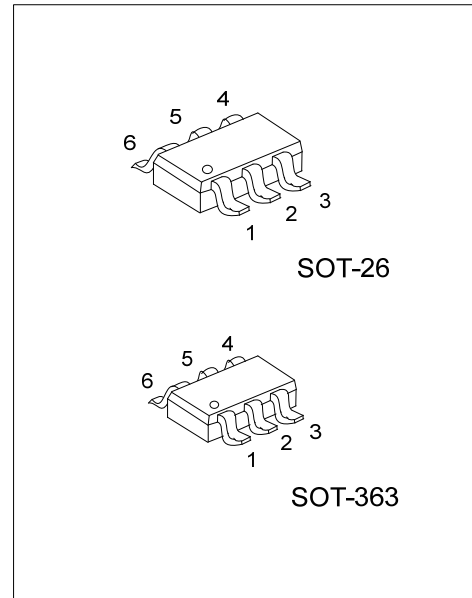
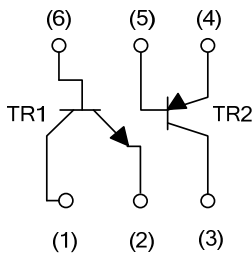
### POWER MANAGEMENT (DUAL TRANSISTOR)

■ 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



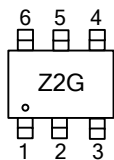
■ ORDERING INFORMATION

Ordering Number	Package	Pin Assignment						Packing
		1	2	3	4	5	6	
IMZ2AG-AG6-R	SOT-26	C1	E1	C2	E2	B2	B1	Tape Reel
IMZ2AG-AL6-R	SOT-363	C1	E1	C2	E2	B2	B1	Tape Reel

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

<p>IMZ2AL-AG6-R</p> <p>(1)Packing Type (2)Package Type (3)Green Package</p>	<p>(1) R: Tape Reel (2) AG6: SOT-26, AL6: SOT-363 (3) G: Halogen Free and Lead Free</p>
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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	
Collector-Emitter Voltage	TR1	$V_{CEO}$	50	V
	TR2		-50	
Emitter-Base Voltage	TR1	$V_{EBO}$	7	V
	TR2		-6	
Collector Current	TR1	$I_C$	150	mA
	TR2		-150	
Collector Power Dissipation (Total)	SOT-26	$P_C$	300 (Note1)	mW
	SOT-363		200	
Junction Temperature		$T_J$	+150	$^{\circ}\text{C}$
Storage Temperature		$T_{STG}$	-55~+150	$^{\circ}\text{C}$

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

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
<b>TR1</b>						
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	$\mu\text{A}$
Emitter Cut-Off Current	$I_{EBO}$	$V_{EB}=7\text{V}$			0.1	$\mu\text{A}$
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
<b>TR2</b>						
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	$\mu\text{A}$
Emitter Cut-Off Current	$I_{EBO}$	$V_{EB}= -6\text{V}$			-0.1	$\mu\text{A}$
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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