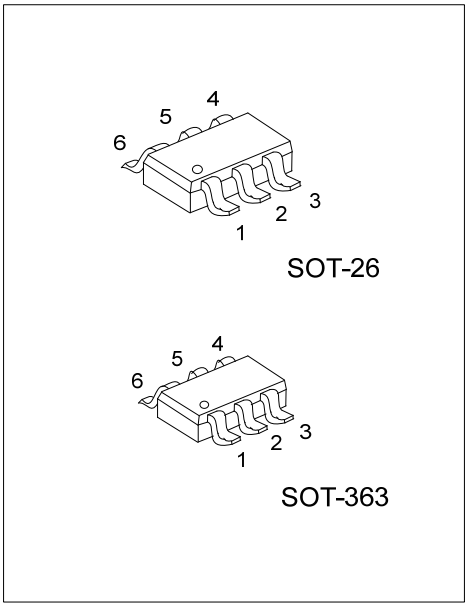
IMZ2A

DUAL TRANSISTOR

POWER MANAGEMENT (DUAL TRANSISTOR)

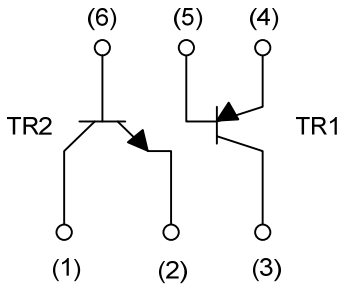


Lead-free: IMZ2AL
Halogen-free: IMZ2AG

■ FEATURES

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

■ EQUIVALENT CIRCUITS

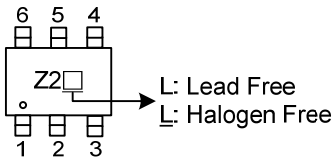


■ ORDERING INFORMATION

Ordering Number			Package	Pin Assignment						Packing
Normal	Lead Free	Halogen Free		1	2	3	4	5	6	
IMZ2A-AG6-R	IMZ2AL-AG6-R	IMZ2AG-AG6-R	SOT-26	C2	E2	C1	E1	B1	B2	Tape Reel
IMZ2A-AL6-R	IMZ2AL-AL6-R	IMZ2AG-AL6-R	SOT-363	C2	E2	C1	E1	B1	B2	Tape Reel

IMZ2AL-AG6-R (1)Packing Type (2)Package Type (3)Lead Plating	(1) R: Tape Reel (2) AG6: SOT-26, AL6: SOT-363 (3) G: Halogen Free, L: Lead Free, Blank: Pb/Sn

■ MARKING



■ ABSOLUTE MAXIMUM RATINGS (Ta=25°C)

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)	Pc	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°C)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
TR1						
Collector-Base Breakdown Voltage	BV_{CBO}	I_C = -50μA	-60			V
Collector-Emitter Breakdown Voltage	BV_{CEO}	I_C = -1mA	-50			V
Emitter-Base Breakdown Voltage	BV_{EBO}	I_E= -50μA	-6			V
Collector Cut-Off Current	I_{CBO}	V_{CB}= -60V			-0.1	μA
Emitter Cut-Off Current	I_{EBO}	V_{EB}= -6V			-0.1	μA
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	Cob	V_{CB}= -12V,I_E=0A, f=1MHz		4	5	pF
TR2						
Collector-Base Breakdown Voltage	BV_{CBO}	I_C =50μA	60			V
Collector-Emitter Breakdown Voltage	BV_{CEO}	I_C = 1mA	50			V
Emitter-Base Breakdown Voltage	BV_{EBO}	I_E= 50μA	7			V
Collector Cut-Off Current	I_{CBO}	V_{CB}=60V			0.1	μA
Emitter Cut-Off Current	I_{EBO}	V_{EB}=7V			0.1	μA
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	Cob	V_{CB}= 12V, I_E=0A, f=1MHz		2	3.5	pF

Note: Transition frequency of the device.