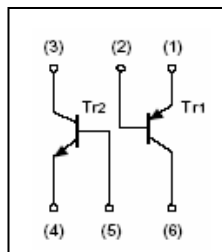


**SOT-563 Plastic-Encapsulate Transistors****EMZ8** Power management (dual transistors)**FEATURES**

Both a 2SA2018 chip and 2SC2412K chip in a package.

External circuit**SOT-563**

1

MARKING:Z8**Absolute maximum ratings(Ta=25°C)**

Symbol	Parameter	Value		Units
		Tr1	Tr2	
V _{CBO}	Collector-Base Voltage	-15	60	V
V _{CEO}	Collector-Emitter Voltage	-12	50	V
V _{EBO}	Emitter-Base Voltage	-6	7	V
I _C	Collector Current -Continuous	-150	150	mA
P _C	Collector Power Dissipation	150(TOTAL)		mW
T _J	Junction Temperature	150		°C
T _{stg}	Storage Temperature	-55-+150		°C

ELECTRICAL CHARACTERISTICS (Tamb=25°C unless otherwise specified)**Tr1**

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	V _{(BR)CBO}	I _C = -10μA, I _E =0	-15			V
Collector-emitter breakdown voltage	V _{(BR)CEO}	I _C = -1mA, I _B =0	-12			V
Emitter-base breakdown voltage	V _{(BR)EBO}	I _E = -10μA, I _C =0	-6			V
Collector cut-off current	I _{CBO}	V _{CB} =-15V, I _E =0			-0.1	μA
Emitter cut-off current	I _{EBO}	V _{EB} = -6V, I _C =0			-0.1	μA
DC current gain	h _{FE}	V _{CE} =-2V, I _C = -10mA	270		680	
Collector-emitter saturation voltage	V _{CEsat}	I _C = -200mA, I _B = -10mA			-0.25	V
Transition frequency	f _T	V _{CE} =-2V, I _C = -10mA, f=100MHz		260		MHz
Output capacitance	C _{ob}	V _{CB} =-10V, I _E =0, f=1MHz		6.5		pF

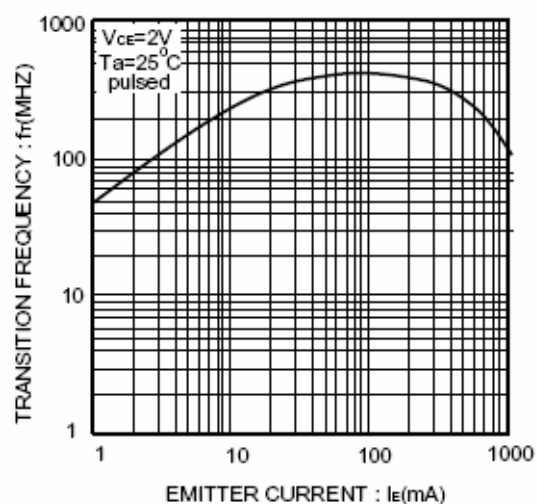
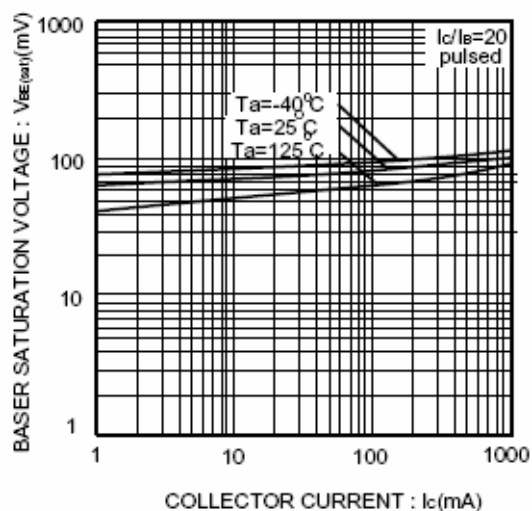
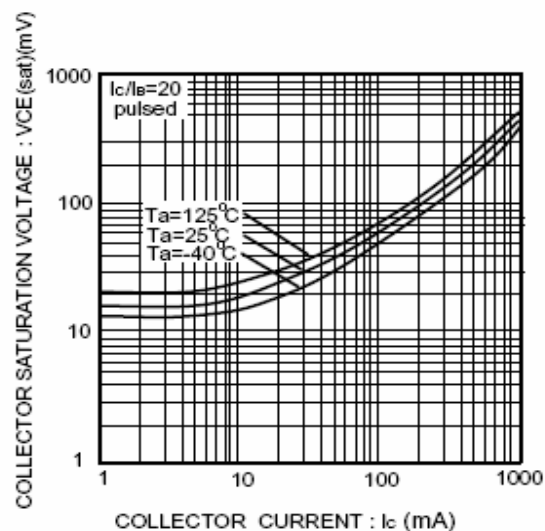
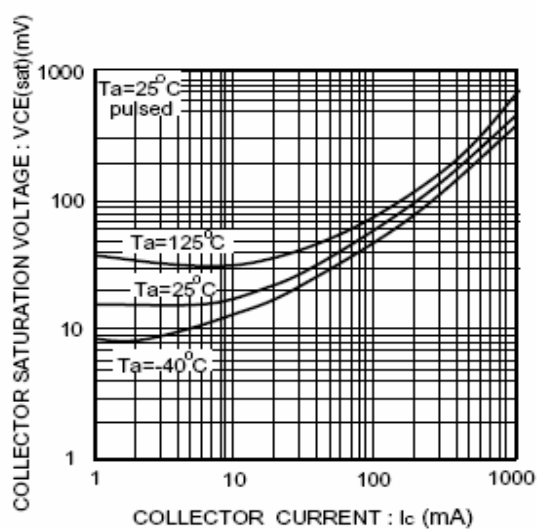
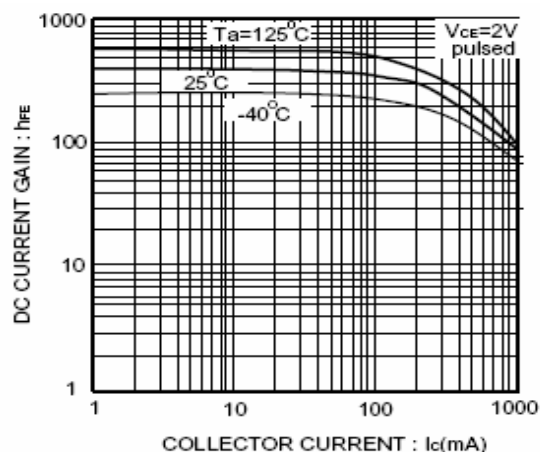
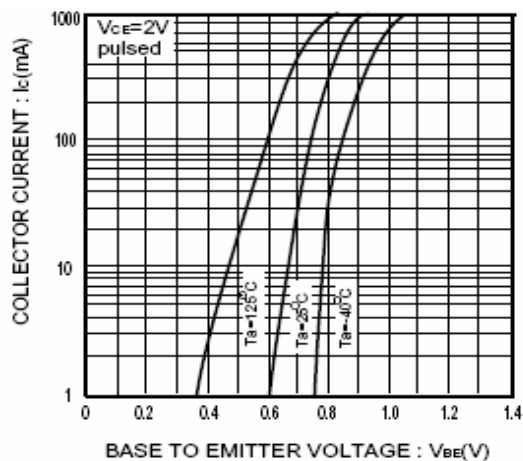
Tr2

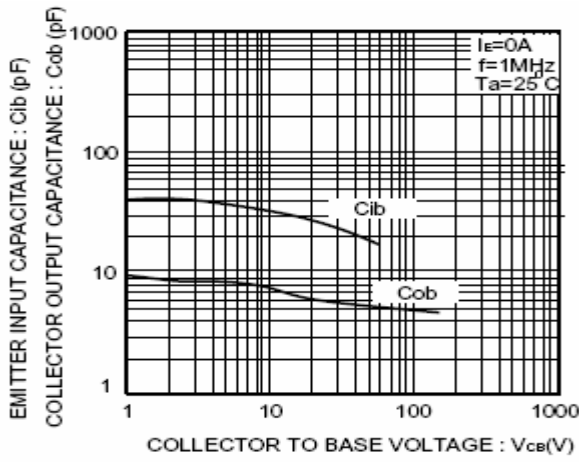
Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	V _{(BR)CBO}	I _C =50μA, I _E =0	60			V
Collector-emitter breakdown voltage	V _{(BR)CEO}	I _C =1mA, I _B =0	50			V
Emitter-base breakdown voltage	V _{(BR)EBO}	I _E =50μA, I _C =0	7			V
Collector cut-off current	I _{CBO}	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 gain	h _{FE}	V _{CE} =6V, I _C =1mA	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 _C =2mA, f=100MHz		180		MHz
Collector output capacitance	C _{ob}	V _{CB} =12V, I _E =0, f=1MHz		2.0	3.5	pF

Typical Characteristics

EMZ8

TR1





TR2

