

Plastic-Encapsulate Transistors

DUAL TRANSISTOR(NPN+NPN)

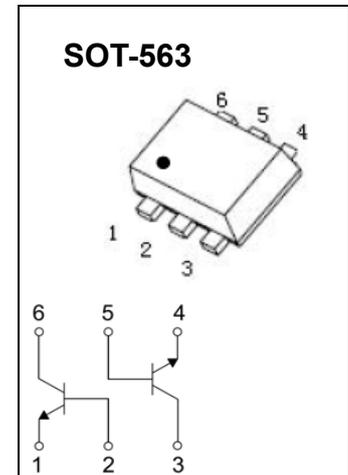
FEATURES

- Two 2SC2412K chips in a SOT-563 package
- Mounting possible with SOT-563 automatic mounting machines
- Transistor elements are independent, eliminating interference
- Mounting cost and area can be cut in half

MARKING:X1

MAXIMUM RATINGS ($T_a=25^{\circ}\text{C}$ unless otherwise noted)

Symbol	Parameter	Value	Units
V_{CBO}	Collector-Base Voltage	60	V
V_{CEO}	Collector-Emitter Voltage	50	V
V_{EBO}	Emitter-Base Voltage	7	V
I_{C}	Collector Current -Continuous	150	mA
P_{C}	Collector Power Dissipation	150	mW
$T_{\text{J}}, T_{\text{stg}}$	Operation Junction and Storage Temperature Range	-55~+150	$^{\circ}\text{C}$



ELECTRICAL CHARACTERISTICS ($T_a=25^{\circ}\text{C}$ unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(\text{BR})\text{CBO}}$	$I_{\text{C}}=50\mu\text{A}, I_{\text{E}}=0$	60			V
Collector-emitter breakdown voltage	$V_{(\text{BR})\text{CEO}}$	$I_{\text{C}}=1\text{mA}, I_{\text{B}}=0$	50			V
Emitter-base breakdown voltage	$V_{(\text{BR})\text{EBO}}$	$I_{\text{E}}=50\mu\text{A}, I_{\text{C}}=0$	7			V
Collector cut-off current	I_{CBO}	$V_{\text{CB}}=60\text{V}, I_{\text{E}}=0$			0.1	μA
Emitter cut-off current	I_{EBO}	$V_{\text{EB}}=7\text{V}, I_{\text{C}}=0$			0.1	μA
DC current gain	h_{FE}	$V_{\text{CE}}=6\text{V}, I_{\text{C}}=1\text{mA}$	120		560	
Collector-emitter saturation voltage	$V_{\text{CE}(\text{sat})}$	$I_{\text{C}}=50\text{mA}, I_{\text{B}}=5\text{mA}$			0.4	V
Transition frequency	f_{T}	$V_{\text{CE}}=12\text{V}, I_{\text{C}}=2\text{mA}, f=100\text{MHz}$		180		MHz
Collector output capacitance	C_{ob}	$V_{\text{CB}}=12\text{V}, I_{\text{E}}=0, f=1\text{MHz}$		2.0	3.5	pF

