

SOT-223 Plastic-Encapsulate Transistors

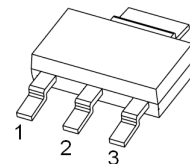
CZT3055 TRANSISTOR (NPN)

FEATURES

- High Current
- Low Voltage
- Complement to CZT2955
- Surface Mounted Power Amplifier Application

SOT-223

1. BASE
2. COLLECTOR
3. EMITTER



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

Symbol	Parameter	Value	Unit
V_{CBO}	Collector-Base Voltage	100	V
V_{CEO}	Collector-Emitter Voltage	60	V
V_{EBO}	Emitter-Base Voltage	7	V
I_C	Collector Current	6	A
P_C	Collector Power Dissipation	1	W
$R_{\theta JA}$	Thermal Resistance From Junction To Ambient	125	$^\circ\text{C/W}$
T_J	Junction Temperature	150	$^\circ\text{C}$
T_{stg}	Storage Temperature	-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-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C=30\text{mA}, I_B=0$	60			V
Collector-emitter breakdown voltage	$V_{(BR)CER}$	$I_C=30\text{mA}, R_{BE}=100\ \Omega$	70			V
Collector cut-off current	I_{CEO}	$V_{CE}=30\text{V}, I_B=0$			700	μA
	I_{CEV}	$V_{CE}=100\text{V}, V_{EB}=1.5\text{V}$			1	mA
Emitter cut-off current	I_{EBO}	$V_{EB}=7\text{V}, I_C=0$			5	mA
DC current gain	$h_{FE(1)}$	$V_{CE}=4\text{V}, I_C=4\text{A}$	20		70	
	$h_{FE(2)}$	$V_{CE}=4\text{V}, I_C=6\text{A}$	5			
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=4\text{A}, I_B=400\text{mA}$			1.1	V
Base-emitter voltage	V_{BE}	$V_{CE}=4\text{V}, I_C=4\text{A}$			1.5	V
Transition frequency	f_T	$V_{CE}=10\text{V}, I_C=500\text{mA}, f=1\text{MHz}$	2.5			MHz