



JIANGSU CHANGJIANG ELECTRONICS TECHNOLOGY CO., LTD

SOT-23 Plastic-Encapsulate Transistors

2SD1757K TRANSISTOR (NPN)

FEATURES

- Optimal for muting.

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

Symbol	Parameter	Value	Units
V_{CBO}	Collector-Base Voltage	30	V
V_{CEO}	Collector-Emitter Voltage	15	V
V_{EBO}	Emitter-Base Voltage	6.5	V
I_C	Collector Current -Continuous	500	mA
P_C	Collector Power Dissipation	200	mW
T_J	Junction Temperature	150	$^{\circ}\text{C}$
T_{stg}	Storage Temperature	-55-150	$^{\circ}\text{C}$

SOT-23



1. BASE
2. EMITTER
3. COLLECTOR

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

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C=50\mu\text{A}, I_E=0$	30			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C=1\text{mA}, I_B=0$	15			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E=50\mu\text{A}, I_C=0$	6.5			V
Collector cut-off current	I_{CBO}	$V_{CB}=20\text{V}, I_E=0$			0.5	μA
Emitter cut-off current	I_{EBO}	$V_{EB}=4\text{V}, I_C=0$			0.5	μA
DC current gain	h_{FE}	$V_{CE}=3\text{V}, I_C=100\text{mA}$	120		560	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=500\text{mA}, I_B=50\text{mA}$			0.4	V
Transition frequency	f_T	$V_{CE}=5\text{V}, I_C=50\text{mA}, f=100\text{MHz}$		150		MHz
Collector Output Capacitance	C_{ob}	$V_{CB}=10\text{V}, I_E=0, f=1\text{MHz}$		15		pF

CLASSIFICATION OF h_{FE}

Rank	Q	R	S
Range	120-270	180-390	270-560
MARKING	AAQ	AAR	AAS

Typical Characteristics

2SD1757K

