



JIANGSU CHANGJIANG ELECTRONICS TECHNOLOGY CO., LTD

SOT-23 Plastic-Encapsulate Transistors

KTC3879 TRANSISTOR (NPN)

FEATURES

Power dissipation

P_{CM} : 0.15 W ($T_{amb}=25^{\circ}C$)

Collector current

I_{CM} : 0.05 A

Collector-base voltage

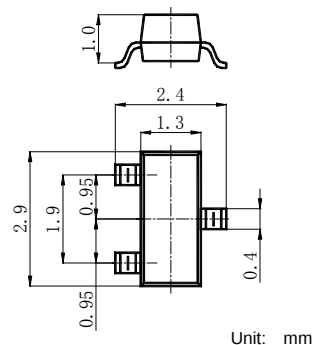
$V_{(BR)CBO}$: 35 V

Operating and storage junction temperature range

T_J, T_{stg} : $-55^{\circ}C$ to $+150^{\circ}C$

SOT-23

1. BASE
2. EMITTER
3. COLLECTOR



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

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C=100\mu A, I_E=0$	35			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C=100\mu A, I_B=0$	30			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E=100\mu A, I_C=0$	4			V
Collector cut-off current	I_{CBO}	$V_{CB}=30V, I_E=0$			0.1	μA
Emitter cut-off current	I_{EBO}	$V_{EB}=4V, I_C=0$			1	μA
DC current gain	h_{FE}	$V_{CE}=12V, I_C=2mA$	40		240	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=10mA, I_B=1mA$			0.4	V
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_C=10mA, I_B=1mA$			1	V
Transition frequency	f_T	$V_{CE}=10V, I_C=1mA$	100		400	MHz
Collector output capacitance	C_{ob}	$V_{CB}=10V, I_E=0, f=1MHz$	1.4		3.2	pF
Power Gain	G_{pe}	$V_{CC}=6V, I_C=1mA, f=10.7MHz$	27		33	dB

CLASSIFICATION OF h_{FE}

Rank	R	O	Y
Range	40-80	70-140	120-240
Marking	RR	RO	RY