



JIANGSU CHANGJIANG ELECTRONICS TECHNOLOGY CO., LTD

SOT-89 Plastic-Encapsulate Transistors

KTC4379 TRANSISTOR (NPN)

FEATURES

- Low saturation voltage
- High speed switching time
- Complementary to KTA1666

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

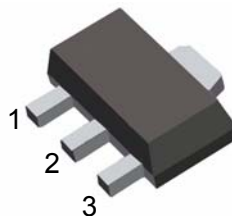
Symbol	Parameter	Value	Units
V_{CBO}	Collector-Base Voltage	50	V
V_{CEO}	Collector-Emitter Voltage	50	V
V_{EBO}	Emitter-Base Voltage	5	V
I_C	Collector Current -Continuous	2	A
P_C	Collector Power Dissipation	500	mW
T_J	Junction Temperature	150	$^{\circ}\text{C}$
T_{stg}	Storage Temperature	-55-150	$^{\circ}\text{C}$

SOT-89

1. BASE

2. COLLECTOR

3. EMITTER



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

Parameter		Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage		$V_{(BR)CBO}$	$I_C=1\text{mA}, I_E=0$	50			V
Collector-emitter breakdown voltage		$V_{(BR)CEO}$	$I_C=10\text{mA}, I_B=0$	50			V
Emitter-base breakdown voltage		$V_{(BR)EBO}$	$I_E=1\text{mA}, I_C=0$	5			V
Collector cut-off current		I_{CBO}	$V_{CB}=50\text{V}, I_E=0$			0.1	μA
Emitter cut-off current		I_{EBO}	$V_{EB}=5\text{V}, I_C=0$			0.1	μA
DC current gain		$h_{FE(1)}$	$V_{CE}=2\text{V}, I_C=500\text{mA}$	70		240	
		$h_{FE(2)}$	$V_{CE}=2\text{V}, I_C=1.5\text{A}$	40			
Collector-emitter saturation voltage		$V_{CE(sat)}$	$I_C=1\text{A}, I_B=50\text{mA}$			0.5	V
Base-emitter saturation voltage		$V_{BE(sat)}$	$I_C=1\text{A}, I_B=50\text{mA}$			1.2	V
Transition frequency		f_T	$V_{CE}=2\text{V}, I_C=500\text{mA}$		120		MHz
Collector output capacitance		C_{ob}	$V_{CB}=10\text{V}, I_E=0, f=1\text{MHz}$		30		pF
Switching Time	Turn on Time	t_{on}	$V_{CC}=30\text{V}, I_C=1\text{A}, I_{B1}=-I_{B2}=-0.05\text{A}$		0.1		μs
	Storage Time	t_{stg}			1.0		
	Fall Time	t_f			0.1		

CLASSIFICATION OF $h_{FE(1)}$

Rank	O	Y
Range	70-140	120-240
Marking	UO	UY

Typical Characteristics

KTC4379

