

KTC4377 TRANSISTOR (NPN)**FEATURES**

Power dissipation

 P_{CM} : 0.5 W ($T_{amb}=25^{\circ}C$)

Collector current

 I_{CM} : 2 A

Collector-base voltage

 $V_{(BR)CBO}$: 30 V

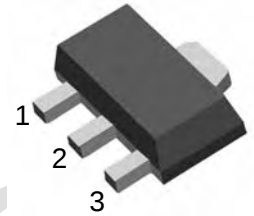
Operating and storage junction temperature range

 T_J, T_{stg} : $-55^{\circ}C$ to $+150^{\circ}C$ **SOT-89**

1. BASE

2. COLLECTOR

3. EMITTER

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

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C=1mA, I_E=0$	30			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C=10mA, I_B=0$	10			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E=1mA, I_C=0$	6			V
Collector cut-off current	I_{CBO}	$V_{CB}=30V, I_E=0$			0.1	μA
Emitter cut-off current	I_{EBO}	$V_{EB}=6V, I_C=0$			0.1	μA
DC current gain	$h_{FE(1)}$	$V_{CE}=1V, I_C=0.5A$	140		600	
	$h_{FE(2)}$	$V_{CE}=1V, I_C=2A$	70			
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=2A, I_B=50mA$			0.5	V
Base-emitter voltage	V_{BE}	$V_{CE}=1V, I_C=2A$			1.5	V
Transition frequency	f_T	$V_{CE}=1V, I_C=0.5A$		150		MHz
Collector output capacitance	C_{ob}	$V_{CB}=10V, I_E=0, f=1MHz$		27		pF

CLASSIFICATION OF $h_{FE(1)}$

Rank	A	B	C	D
Range	140-240	200-330	300-450	420-600
Marking	SA	SB	SC	SD