

KTC4374 TRANSISTOR (NPN)

FEATURES

Power dissipation

$$P_{CM}: 500 \text{ mW (Tamb=25}^\circ\text{C)}$$

Collector current

$$I_{CM}: 400 \text{ mA}$$

Collector-base voltage

$$V_{(BR)CBO}: 80 \text{ V}$$

Operating and storage junction temperature range

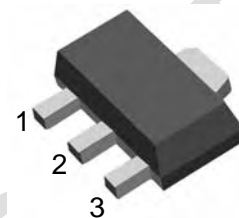
$$T_J, T_{stg}: -55^\circ\text{C to } +150^\circ\text{C}$$

SOT-89

1. BASE

2. COLLECTOR

3. EMITTER



ELECTRICAL CHARACTERISTICS (Tamb=25°C unless otherwise specified)

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C=1\text{mA}, I_E=0$	80			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C=10\text{mA}, I_B=0$	80			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E=1\text{mA}, I_C=0$	5			V
Collector cut-off current	I_{CBO}	$V_{CB}=80\text{V}, I_E=0$			0.1	μA
Emitter cut-off current	I_{EBO}	$V_{EB}=5\text{V}, I_C=0$			0.1	μA
DC current gain	$h_{FE(1)}$	$V_{CE}=2\text{V}, I_C=50\text{mA}$	70		240	
	$h_{FE(2)}$	$V_{CE}=2\text{V}, I_C=200\text{mA}$	50			
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=200\text{mA}, I_B=20\text{mA}$			0.4	V
Base-emitter voltage	V_{BE}	$V_{CE}=2\text{V}, I_C=5\text{mA}$			0.8	V
Transition frequency	f_T	$V_{CE}=10\text{V}, I_C=10\text{mA}$		100		MHz
Collector output capacitance	C_{ob}	$V_{CB}=10\text{V}, I_E=0, f=1\text{MHz}$		10		pF

CLASSIFICATION OF $h_{FE(1)}$

Rank	O	Y
Range	70-140	120-240
Marking	EO	EY