



SOT-23 Plastic-Encapsulate Transistors

KTC4075 TRANSISTOR (NPN)

FEATURES

Power dissipation

P_{CM} : 0.1 W ($T_{amb}=25^{\circ}C$)

Collector current

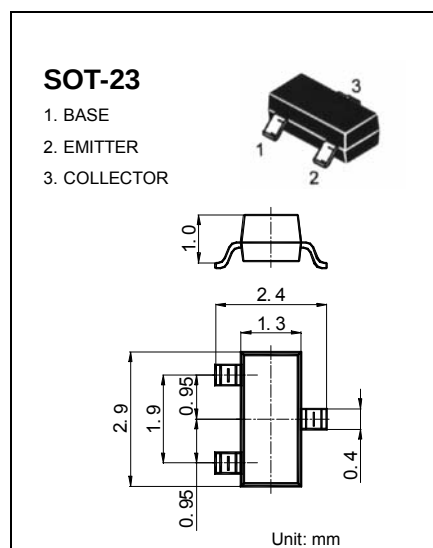
I_{CM} : 0.15 A

Collector-base voltage

$V_{(BR)CBO}$: 60 V

Operating and storage junction temperature range

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



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

Parameter	Symbol	Test conditions	MIN	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C = 100\mu A, I_E = 0$	60		V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C = 1mA, I_B = 0$	50		V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E = 100\mu A, I_C = 0$	5		V
Collector cut-off current	I_{CBO}	$V_{CB} = 60V, I_E = 0$		0.1	μA
Emitter cut-off current	I_{EBO}	$V_{EB} = 5V, I_C = 0$		0.1	μA
DC current gain	h_{FE}	$V_{CE} = 6V, I_C = 2mA$	70	700	
Collector-emitter saturation voltage	V_{CEsat}	$I_C = 100mA, I_B = 10mA$		0.25	V
Transition frequency	f_T	$V_{CE} = 10V, I_C = 1mA$	80		MHz
Collector output capacitance	C_{ob}	$V_{CE} = 10V, I_E = 0, f = 1MHz$		3.5	dB
Noise figure	NF	$V_{CE} = 6V, I_E = 0.1mA, f = 1KHz, R_G = 10K\Omega$		10	dB

CLASSIFICATION OF h_{FE}

Rank	O	Y	GR	BL
Range	70~140	120~240	200~400	350~700
Marking	LO	LY	LGR	LBL