

KSD471A TRANSISTOR (NPN)

FEATURES

Power dissipation

P_{CM} : 0.8 W ($T_{amb}=25^{\circ}C$)

Collector current

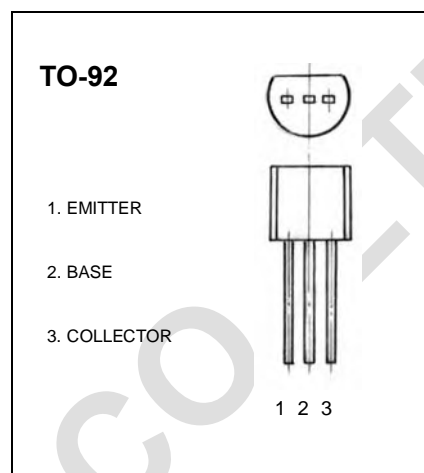
I_{CM} : 1 A

Collector-base voltage

$V_{(BR)CBO}$: 40 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	TYP	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C=100\mu A, I_E=0$	40			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C=10mA, I_B=0$	30			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_C=100\mu A, I_B=0$	5			V
Collector cut-off current	I_{CBO}	$V_{CB}=30V, I_E=0$			0.1	μA
DC current gain	h_{FE}	$V_{CE}=1V, I_C=100mA$	70		400	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=1A, I_B=0.1A$			0.5	V
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_C=1A, I_B=0.1A$			1.2	V
Transition frequency	f_T	$V_{CE}=6V, I_E=0, f=1MHz$	100			MHz
Collector output capacitance	C_{ob}	$V_{CE}=6V, I_E=0, f=1MHz$			25	pF

CLASSIFICATION OF $h_{FE(1)}$

Rank	O	Y	G
Range	70-140	120-240	200-400