

KSC2331 TRANSISTOR (NPN)

FEATURE

Power dissipation

P_{CM} : 1 W ($T_{amb}=25^{\circ}C$)

Collector current

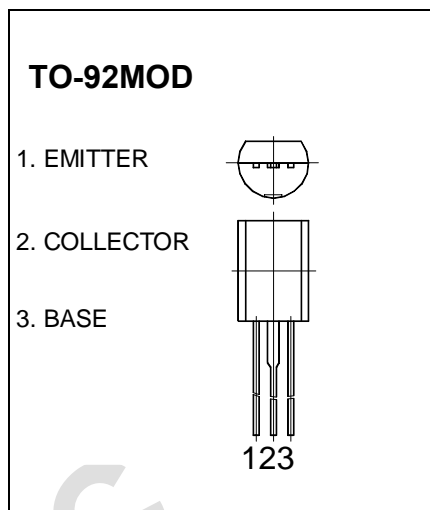
I_{CM} : 0.7 A

Collector-base voltage

$V_{(BR)CBO}$: 80 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	$V_{(BR)CBO}$	$I_C=100\mu A, I_E=0$	80		V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C=10mA, I_B=0$	60		V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E=10\mu A, I_C=0$	8		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_{FE1}	$V_{CE}=2V, I_C=50mA$	120	240	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=500mA, I_B=50mA$		0.7	V
Base-emitter voltage	$V_{BE(sat)}$	$I_C=500mA, I_B=50mA$		1.2	V
Transition frequency	f_T	$V_{CE}=10V, I_C=50mA$	50		MHz

CLASSIFICATION OF $h_{FE(1)}$

Rank	R	O
Range	40-80	70-140