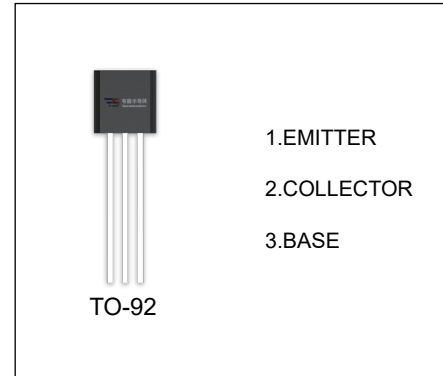


2SC2274 TRANSISTOR (NPN)

FEATURES

- High Breakdown Voltage
- High Current
- Low Saturation Voltage



ORDERING INFORMATION

Part Number	Package	Packing Method	Pack Quantity
2SC2274	TO-92	Bulk	1000pcs/Bag
2SC2274-TA	TO-92	Tape	2000pcs/Box

MAXIMUM RATINGS (T_a=25°C unless otherwise noted)

Symbol	Parameter	Value	Unit
V _{CB0}	Collector-Base Voltage	60	V
V _{CE0}	Collector-Emitter Voltage	50	V
V _{EB0}	Emitter-Base Voltage	5	V
I _C	Collector Current -Continuous	0.5	A
P _D	Collector Power Dissipation	600	mW
R _{θJA}	Thermal Resistance from Junction to Ambient	208	°C /W
T _J , T _{stg}	Operation Junction and Storage Temperature Range	-55~+150	°C

$T_a=25\text{ }^\circ\text{C}$ unless otherwise specified

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C=0.01\text{mA}, I_E=0$	60			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C=1\text{mA}, I_B=0$	50			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E=0.01\text{mA}, I_C=0$	5			V
Collector cut-off current	I_{CBO}	$V_{CB}=40\text{V}, I_E=0$			1	μA
Emitter cut-off current	I_{EBO}	$V_{EB}=4\text{V}, I_C=0$			1	μA
DC current gain	$h_{FE(1)}$	$V_{CE}=5\text{V}, I_C=50\text{mA}$	60		320	
	$h_{FE(2)}$ *	$V_{CE}=5\text{V}, I_C=400\text{mA}$	35			
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=400\text{mA}, I_B=40\text{mA}$			0.6	V
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_C=400\text{mA}, I_B=40\text{mA}$			1.2	V
Collector output capacitance	C_{ob}	$V_{CB}=10\text{V}, f=1\text{MHz}$		5		pF
Transition frequency	f_T	$V_{CE}=10\text{V}, I_C=10\text{mA}$		120		MHz

*Pulse test

CLASSIFICATION OF $h_{FE(1)}$

RANK	D	E	F
RANGE	60-120	100-200	160-320

Static Characteristic
