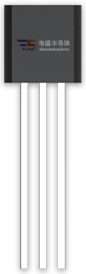
PH2369 TRANSISTOR (NPN)

FEATURES

- Power Dissipation



1.EMITTER

2.COLLECTOR

3.BASE

TO-92

ORDERING INFORMATION

Part Number	Package	Packing Method	Pack Quantity
PH2369	TO-92	Bulk	1000pcs/Bag
PH2369-TA	TO-92	Tape	2000pcs/Box

MAXIMUM RATINGS (T_a=25℃ unless otherwise noted)

Symbol	Parameter	Value	Unit
V_{CBO}	Collector-Base Voltage	40	V
V_{CEO}	Collector-Emitter Voltage	15	V
V_{EBO}	Emitter-Base Voltage	4.5	V
I_C	Collector Current –Continuous	0.2	A
P_C	Collector Power Dissipation	500	mW
T_J,T_{stg}	Operation Junction and Storage Temperature Range	-55-150	℃

T_a=25℃ unless otherwise specified

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	I_C= 100μA, I_E=0	40			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	I_C= 10mA, I_B=0	15			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	I_E= 10μA, I_C=0	4.5			V
Collector cut-off current	I_{CBO}	V_{CB}= 20V, I_E=0			0.4	μA
Emitter cut-off current	I_{EBO}	V_{EB}= 4V, I_C=0			0.1	μA
DC current gain	h_{FE1}	V_{CE}= 1V, I_C= 10mA	40		120	
	h_{FE2}	V_{CE}= 2V, I_C= 100mA	20			
Collector-emitter saturation voltage	$V_{CE(sat)}$	I_C=10mA, I_B=1mA			0.25	V
Base-emitter saturation voltage	$V_{BE(sat)}$	I_C=10mA, I_B=1mA	0.7		0.85	V
Transition frequency	f_T	V_{CE}= 10V, I_C=10mA f =100MHz	500			MHz
Collector capacitance	C_c	V_{CB}=5V,I_E=0,f=1MHz			4	pF
Emitter capacitance	C_e	V_{EB}=1V,I_E=0,f=1MHz			4.5	pF
Turn-on time	t_{on}	V_{CC}=3V, I_C=10mA , I_{B1}= 3mA			10	nS
Turn-off time	t_{off}				20	nS