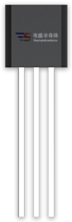
2N5832 TRANSISTOR (NPN)

FEATURES

- General Purpose Switching Application



TO-92

1.EMITTER

2.COLLECTOR

3.BASE

ORDERING INFORMATION

Part Number	Package	Packing Method	Pack Quantity
2N5832	TO-92	Bulk	1000pcs/Bag
2N5832-TA	TO-92	Tape	2000pcs/Box

MAXIMUM RATINGS (T_a=25℃ unless otherwise noted)

Symbol	Parameter	Value	Unit
V_{CBO}	Collector-Base Voltage	160	V
V_{CEO}	Collector-Emitter Voltage	140	V
V_{EBO}	Emitter-Base Voltage	5	V
I_C	Collector Current -Continuous	0.6	A
P_D	Collector Power Dissipation	625	mW
$R_{\theta JA}$	Thermal Resistance rom Junction to Ambient	200	℃ /W
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= 0.1mA,I_E=0	160			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	I_C=1mA,I_B=0	140			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	I_E=0.01mA,I_C=0	5			V
Collector cut-off current	I_{CBO}	V_{CB}=120V,I_E=0			0.05	μA
Emitter cut-off current	I_{EBO}	V_{EB}=4V,I_C=0			0.05	μA
DC current gain	h_{FE}	V_{CE}=5V, I_C=10mA	175		500	
Collector-emitter saturation voltage	$V_{CE(sat)}$	I_C=50mA,I_B=5mA			0.25	V
Base-emitter saturation voltage	$V_{BE\ (sat)}$	I_C=50mA,I_B=5mA			1	V
Base-emitter voltage	V_{BE}	V_{CE}=5V, I_C=1mA			0.8	V
Collector output capacitance	C_{ob}	V_{CB}=10V,I_E=0, f=1MHz			4	pF
Transition frequency	f_T	V_{CE}=10V,I_C=1mA, f=100MHz	100			MHz