KTD1351 TRANSISTOR (NPN)

TO-220C

1.BASE
2.COLLECTOR
3.EMITTER

FEATURES

- Low Saturations Voltage

APPLICATIONS

- General Purpose Applications

MAXIMUM RATINGS (T_a=25℃ unless otherwise noted)

Symbol	Parameter	Value	Unit
V_{CBO}	Collector-Base Voltage	60	V
V_{CEO}	Collector-Emitter Voltage	60	V
V_{EBO}	Emitter-Base Voltage	7	V
I_C	Collector Current	3	A
P_C	Collector Power Dissipation	2	W
$R_{\theta JA}$	Thermal Resistance From Junction To Ambient	63	℃/W
T_j,T_{STG}	Operation Junction and Storage Temperature Range	-55~150	℃

ELECTRICAL CHARACTERISTICS (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	60			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	I_C=50mA,I_B=0	60			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	I_E=100μA,I_C=0	7			V
Collector cut-off current	I_{CBO}	V_{CB}=60V,I_E=0			0.1	mA
Emitter cut-off current	I_{EBO}	V_{EB}=7V,I_C=0			0.1	mA
DC current gain	h_{FE}	V_{CE}=5V, I_C=0.5A	60		300	
Collector-emitter saturation voltage	$V_{CE(sat)}$	I_C=2A,I_B=0.2A			1	V
Base-emitter voltage	V_{BE}	V_{CE}=5V, I_C=0.5A			1	V
Collector output capacitance	C_{ob}	V_{CB}=10V,I_E=0, f=1MHz		35		pF
Transition frequency	f_T	V_{CE}=5V,I_C=0.5A		3		MHz

CLASSIFICATION OF h_{FE}

RANK	O	Y	GR
RANGE	60-120	100-200	150-300