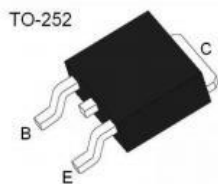


TO-252 Bipolar Transistor 双极型三极管

■ Features 特点

NPN Low Saturation Voltage 低饱和压降



■ Absolute Maximum Ratings 最大额定值

Characteristic 特性参数	Symbol 符号	Rat 额定值	Unit 单位
Collector-Base Voltage 集电极基极电压	V_{CBO}	50	V
Collector-Emitter Voltage 集电极发射极电压	V_{CEO}	50	V
Emitter-Base Voltage 发射极基极电压	V_{EBO}	6	V
Collector Current 集电极电流	I_C	3	A
Collector Current Pulse 集电极脉冲电流	I_{CP}	6	A
Power dissipation 耗散功率	$P_C(T_a=25^{\circ}\text{C})$	1.2	W
Power dissipation 耗散功率	$P_C(T_C=25^{\circ}\text{C})$	10	W
Junction and Storage Temperature 结温和储藏温度	T_J, T_{stg}	-55to+150 $^{\circ}\text{C}$	

■ Device Marking 产品打标

H_{FE}	180-450
Mark	2SCR573D3

■Electrical Characteristics 电特性

(TA=25℃ unless otherwise noted 如无特殊说明, 温度为 25℃)

Characteristic 特性参数	Symbol 符号	Min 最小值	Type 典型值	Max 最大值	Unit 单位
Collector-Base Breakdown Voltage 集电极基极击穿电压($I_C=100\mu A$, $I_E=0$)	BV_{CBO}	50	—	—	V
Collector-Emitter Breakdown Voltage 集电极发射极击穿电压($I_C=1mA$, $I_B=0$)	BV_{CEO}	50	—	—	V
Emitter-Base Breakdown Voltage 发射极基极击穿电压($I_E=100\mu A$, $I_C=0$)	BV_{EBO}	6	—	—	V
Collector-Base Leakage Current 集电极基极漏电流($V_{CB}=50V$, $I_E=0$)	I_{CBO}	—	—	1	μA
Emitter-Base Leakage Current 发射极基极漏电流($V_{EB}=4V$, $I_C=0$)	I_{EBO}	—	—	1	μA
DC Current Gain 直流电流增益($V_{CE}=3V$, $I_C=100mA$)	H_{FE}	180	—	450	
Collector-Emitter Saturation Voltage 集电极发射极饱和压降($I_C=1A$, $I_B=50mA$)	$V_{CE(sat)}$	—	—	0.35	V
Base-Emitter Saturation Voltage 基极发射极饱和压降($I_C=1A$, $I_B=50mA$)	$V_{BE(sat)}$	—	—	1.2	V
Transition Frequency 特征频率($V_{CE}=10V$, $I_C=600mA$)	f_T	—	320	—	MHz
Output Capacitance 输出电容($V_{CB}=10V$, $I_E=0$, $f=1MHz$)	C_{ob}	—	20	—	pF

■Typical Characteristic Curve 典型特性曲线

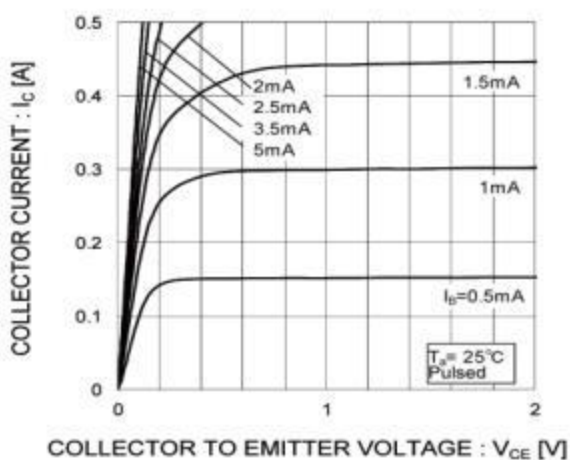


Figure 1. Static Characteristic

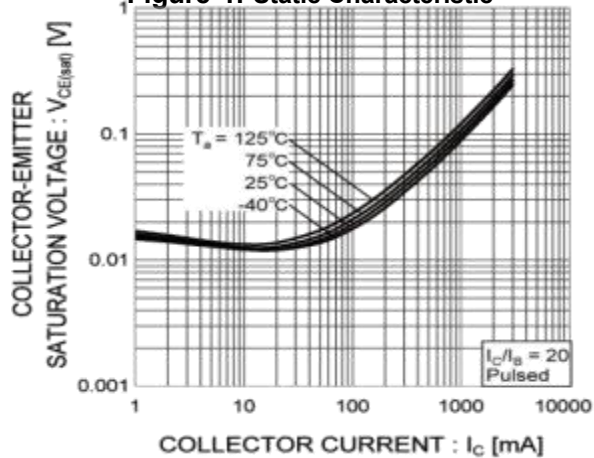


Figure 3. Collector-Emitter Saturation Voltage

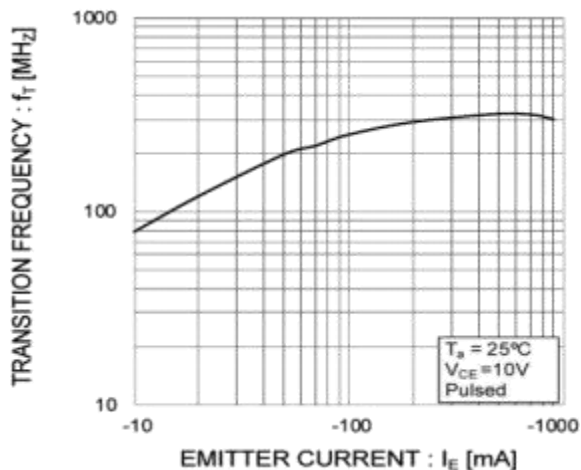


Figure 5. Transition frequency

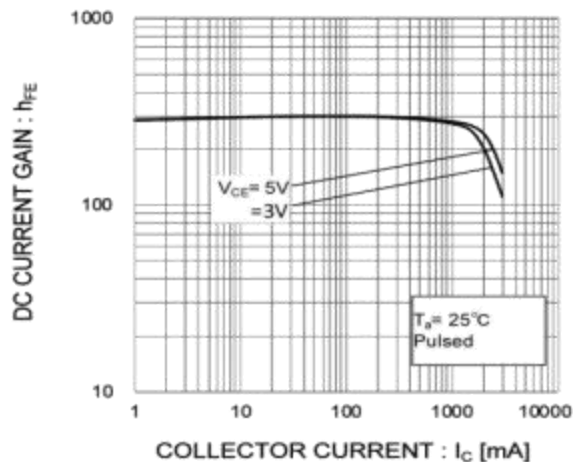


Figure 2. DC current Gain

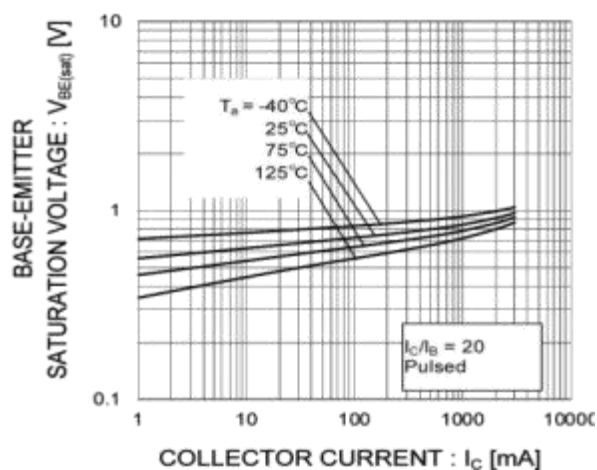


Figure 4. Base-Emitter Saturation Voltage

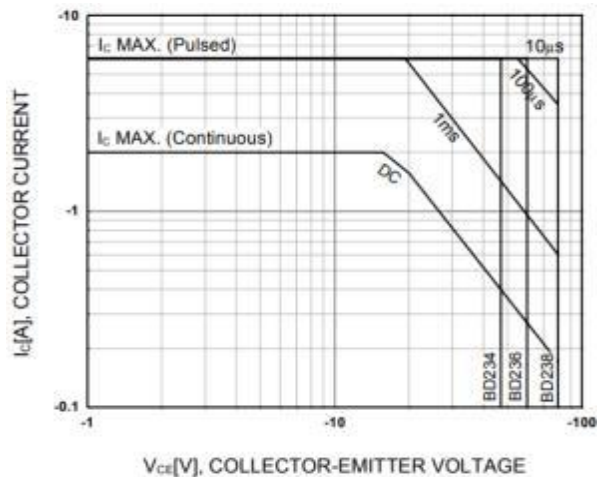


Figure 6. Safe Operating Area

■Dimension 外形封装尺寸

Dim	Millimeter		Inches	
	Min.	Max.	Min.	Max.
A	2.20	2.50	0.087	0.094
A1	1.00	1.40	0.039	0.055
A2	0.00	0.15	0.000	0.006
B	1.30	1.70	0.051	0.067
b	0.50	0.70	0.020	0.028
b1	0.70	0.90	0.028	0.035
c	0.40	0.60	0.016	0.024
c1	0.40	0.60	0.016	0.024
D	6.30	6.70	0.248	0.264
D1	5.10	5.50	0.201	0.217
E	5.30	6.00	0.209	0.236
e	2.20	2.40	0.087	0.094
e1	4.40	4.80	0.173	0.189
L	9.60	10.40	0.378	0.409
L1	0.60	1.00	0.024	0.039
L2	1.40	1.70	0.055	0.063