JCST

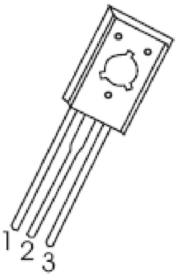
JIANGSU CHANGJIANG ELECTRONICS TECHNOLOGY CO., LTD

TO-126 Plastic-Encapsulate Transistors

2SD2583 TRANSISTOR (NPN)

TO – 126

1. EMITTER
2. COLLECTOR
3. BASE



FEATURES

- Low $V_{CE(sat)}$
- High DC Current Gain

MAXIMUM RATINGS (T_a=25℃ unless otherwise noted)

Symbol	Parameter	Value	Unit
V_{CBO}	Collector-Base Voltage	30	V
V_{CEO}	Collector-Emitter Voltage	30	V
V_{EBO}	Emitter-Base Voltage	6	V
I_C	Collector Current	5	A
P_C	Collector Power Dissipation	1	W
$R_{\theta JA}$	Thermal Resistance From Junction To Ambient	125	℃/W
T_j	Junction Temperature	150	℃
T_{stg}	Storage Temperature	-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	30			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	I_C=1mA,I_B=0	30			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	I_E=100μA,I_C=0	6			V
Collector cut-off current	I_{CBO}	V_{CB}=30V,I_E=0			0.1	μA
Emitter cut-off current	I_{EBO}	V_{EB}=6V,I_C=0			0.1	μA
DC current gain	$h_{FE(1)}$	V_{CE}=2V, I_C=1A	150		600	
	$h_{FE(2)}$	V_{CE}=2V, I_C=4A	50			
Collector-emitter saturation voltage	$V_{CE(sat)1}$	I_C=1A,I_B=0.05A			0.15	V
	$V_{CE(sat)2}$	I_C=2A,I_B=0.1A			0.25	V
	$V_{CE(sat)3}$	I_C=4A,I_B=0.2A			0.5	V
Base-emitter saturation voltage	$V_{BE(sat)}$	I_C=2A,I_B=0.1A			1.5	V
Collector output capacitance	C_{ob}	V_{CB}=10V,I_E=0, f=1MHz		77		pF
Transition frequency	f_T	V_{CE}=10V,I_C=50mA		120		MHz

A,Dec,2010