

NPN SILICON EPITAXIAL TRANSISTOR
FOR HIGH-VOLTAGE SWITCHING

DESCRIPTION

The 2SD2383 is an element realizing high voltage in small dimension. This transistor is ideal for downsizing sets requiring high voltage.

FEATURES

- High voltage
- Small dimension

★ ORDERING INFORMATION

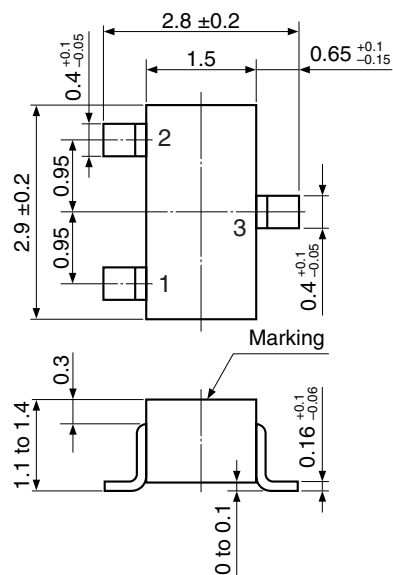
PART NUMBER	PACKAGE
2SD2383	SC-59

Marking: N1

ABSOLUTE MAXIMUM RATINGS (T_A = 25°C)

Collector to Base Voltage	V _{CBO}	400	V
Collector to Emitter Voltage	V _{CEO}	300	V
Emitter to Base Voltage	V _{EBO}	5.0	V
Collector Current (DC)	I _{C(DC)}	20	mA
Total Power Dissipation	P _T	200	mW
Junction Temperature	T _j	150	°C
Storage Temperature	T _{stg}	-55 to +150	°C

★ PACKAGE DRAWING (Unit: mm)



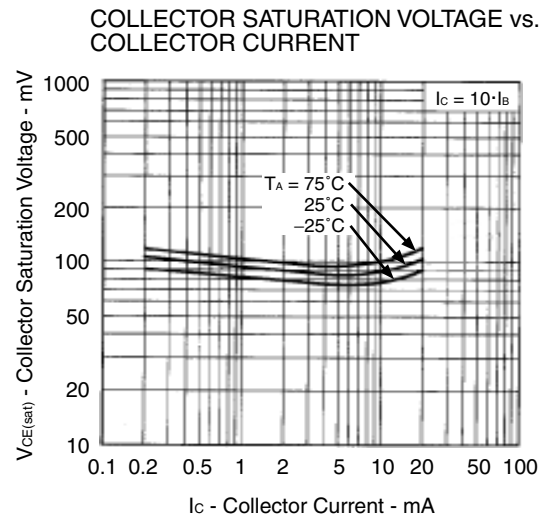
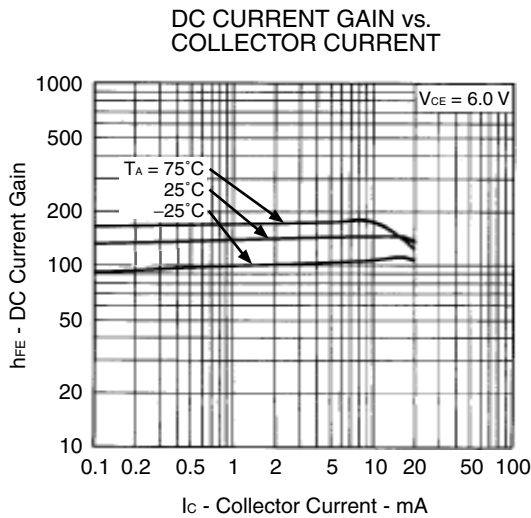
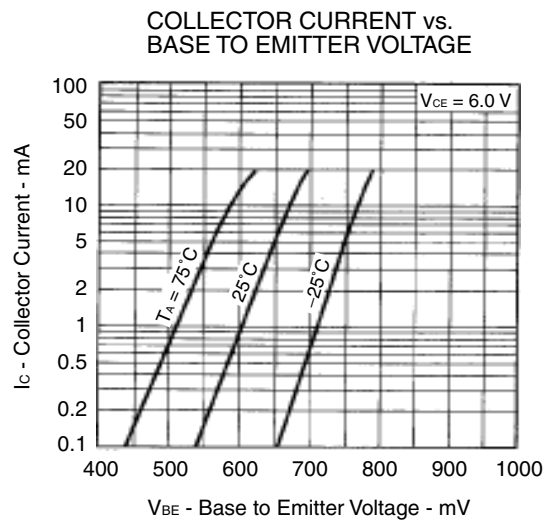
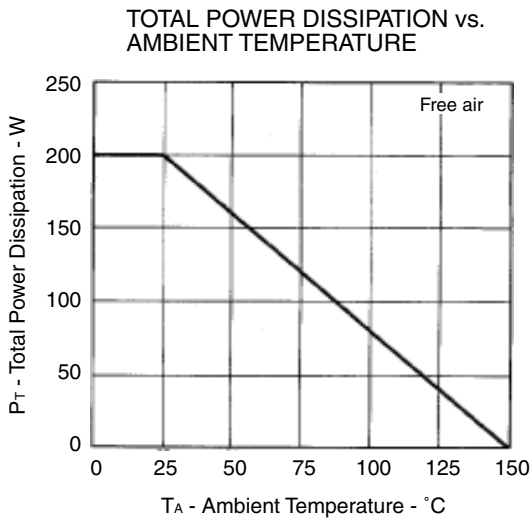
1. Emitter
2. Base
3. Collector

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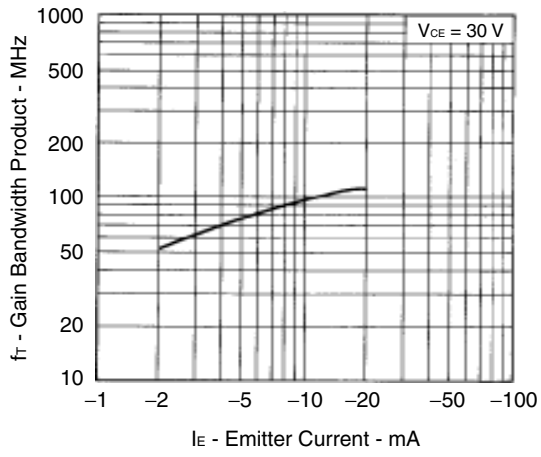
ELECTRICAL CHARACTERISTICS (T_A = 25°C)

CHARACTERISTICS	SYMBOL	TEST CONDITIONS	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	I _{CBO}	V _{CB} = 200 V, I _E = 0 A			100	nA
Emitter Cut-off Current	I _{EBO}	V _{EB} = 5.0 V, I _C = 0 A			100	nA
DC Current Gain	h _{FE}	V _{CE} = 6.0 V, I _C = 5 mA	100		250	-
Collector Saturation Voltage	V _{CE(sat)}	I _C = 5.0 mA, I _B = 0.5 mA		85	500	mV
Base Saturation Voltage	V _{BE(sat)}	I _C = 5.0 mA, I _B = 0.5 mA		0.68	1.0	V
Gain Bandwidth Product	f _T	V _{CE} = 30 V, I _E = -10 mA		90		MHz
Output Capacitance	C _{ob}	V _{CB} = 30 V, I _E = 0, f = 1 MHz		1.3		pF

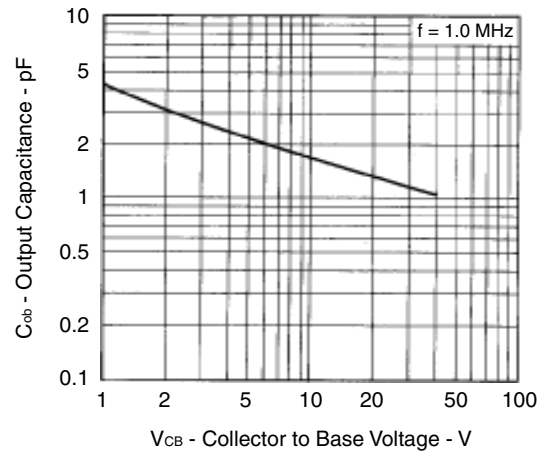
TYPICAL CHARACTERISTICS (T_A = 25°C)



GAIN BANDWIDTH PRODUCT vs. EMITTER CURRENT



OUTPUT CAPACITANCE vs. REVERSE VOLTAGE



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