



DC COMPONENTS CO., LTD.
DISCRETE SEMICONDUCTORS

DMBT2369

TECHNICAL SPECIFICATIONS OF NPN EPITAXIAL PLANAR TRANSISTOR

Description

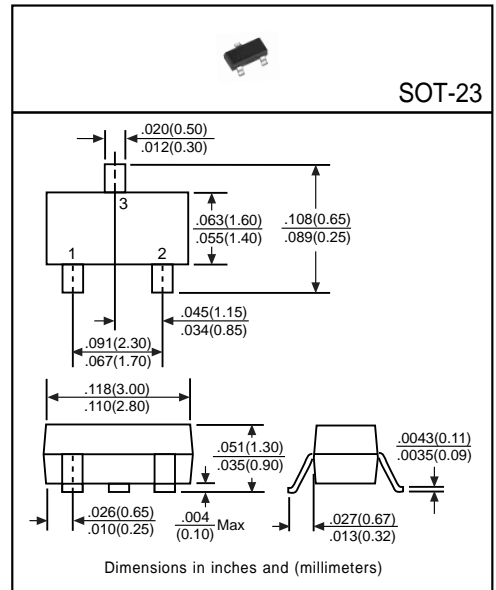
Designed for high speed switching applications.

Pinning

- 1 = Base
- 2 = Emitter
- 3 = Collector

Absolute Maximum Ratings (TA=25°C)

Characteristic	Symbol	Rating	Unit
Collector-Base Voltage	VCBO	40	V
Collector-Emitter Voltage	VCES	40	V
Emitter-Base Voltage	VEBO	4.5	V
Collector Current	IC	500	mA
Total Power Dissipation	PD	225	mW
Junction Temperature	TJ	+150	°C
Storage Temperature	TSTG	-55 to +150	°C



Electrical Characteristics

(Ratings at 25°C ambient temperature unless otherwise specified)

Characteristic	Symbol	Min	Typ	Max	Unit	Test Conditions
Collector-Base Breakdown Voltage	BVCBO	40	-	-	V	IC=10μA, IE=0
Collector-Emitter Breakdown Voltage	BVCES	40	-	-	V	IC=10μA, IB=0
Collector-Emitter Breakdown Voltage	BVCEO	15	-	-	V	IC=10mA, IB=0
Emitter-Base Breakdown Voltage	BVEBO	4.5	-	-	V	IE=10μA, IC=0
Collector Cutoff Current	ICBO	-	-	400	nA	VCB=20V, IE=0
Collector-Emitter Saturation Voltage ⁽¹⁾	VCE(sat)	-	-	250	mV	IC=10mA, IB=1mA
Base-Emitter Saturation Voltage ⁽¹⁾	VBE(sat)	700	-	850	mV	IC=10mA, IB=1mA
DC Current Gain ⁽¹⁾	hFE1	40	-	120	-	IC=10mA, VCE=1V
	hFE2	20	-	-	-	IC=100mA, VCE=2V
Output Capacitance	Cob	-	-	4	pF	VCB=5V, f=1MHz, IE=0

(1) Pulse Test: Pulse Width ≤ 380μs, Duty Cycle ≤ 2%