

MSKSEMI 美森科

SEMICONDUCTOR



ESD



TVS



TSS



MOV



GDT



PLED

2SC2881-x-MS

Product specification

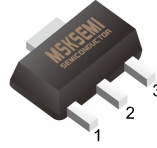
NPN Silicon Epitaxial Planar Transistor

FEATURE

- Power amplifier



Reference News

SOT-89



1. BASE
2. COLLECTOR
3. EMITTER

MARKING

2SC2881-O-MS	2SC2881-Y-MS
	

Absolute Maximum Ratings (T_a= 25°C)

Parameter	Symbol	Value	Unit
Collector Base Voltage	V _{CBO}	120	V
Collector Emitter Voltage	V _{CEO}	120	V
Emitter Base Voltage	V _{EBO}	5	V
Collector Current	I _C	800	mA
Base Current	I _B	160	mA
Collector Power Dissipation	P _C	0.5 1 ¹⁾	W
Junction Temperature	T _J	150	°C
Storage Temperature Range	T _{stg}	- 55 to + 150	°C

¹⁾ Mounted on ceramic board (250 mm² X 0.8 mm).

Characteristics at $T_a = 25\text{ }^{\circ}\text{C}$

Parameter	Symbol	Min.	Typ.	Max.	Unit
DC Current Gain at $V_{CE} = 5\text{ V}$, $I_C = 100\text{ mA}$ Current Gain Group O Y	h_{FE} h_{FE}	80 120	- -	160 240	- -
Collector Base Cutoff Current at $V_{CB} = 120\text{ V}$	I_{CBO}	-	-	100	nA
Emitter Base Cutoff Current at $V_{EB} = 5\text{ V}$	I_{EBO}	-	-	100	nA
Collector Emitter Breakdown Voltage at $I_C = 1\text{ mA}$	$V_{(BR)CEO}$	120	-	-	V
Emitter Base Breakdown Voltage at $I_E = 1\text{ mA}$	$V_{(BR)EBO}$	5	-	-	V
Collector Emitter Saturation Voltage at $I_C = 500\text{ mA}$, $I_B = 50\text{ mA}$	$V_{CE(sat)}$	-	-	1	V
Base Emitter on Voltage at $V_{CE} = 5\text{ V}$, $I_C = 500\text{ mA}$	$V_{BE(on)}$	-	-	1	V
Transition Frequency at $V_{CE} = 5\text{ V}$, $I_C = 100\text{ mA}$	f_T	-	120	-	MHz
Collector Output Capacitance at $V_{CB} = 10\text{ V}$, $f = 1\text{ MHz}$	C_{ob}	-	-	30	pF

Typical Characteristics

Figure 1. Static Characteristic

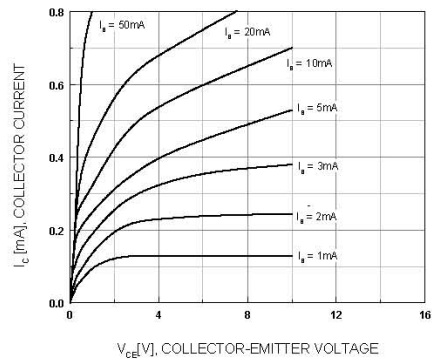


Figure 2. Base-Emitter On Voltage

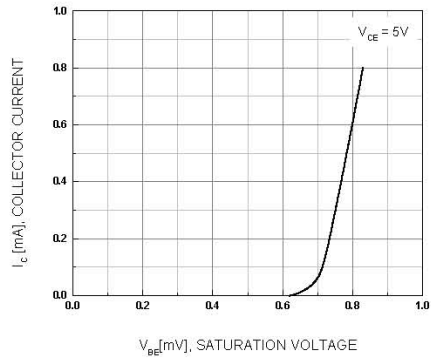


Figure 3. DC Current Gain

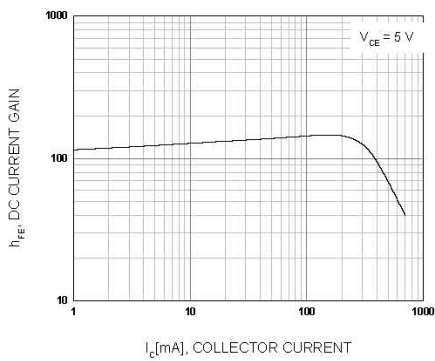


Figure 4. Collector-Emitter Saturation Voltage

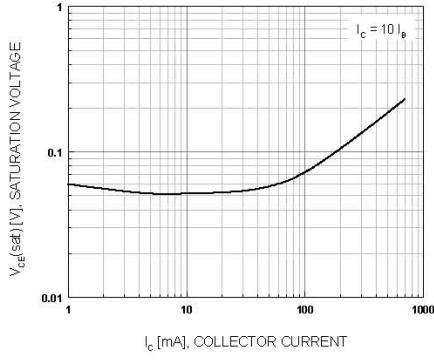
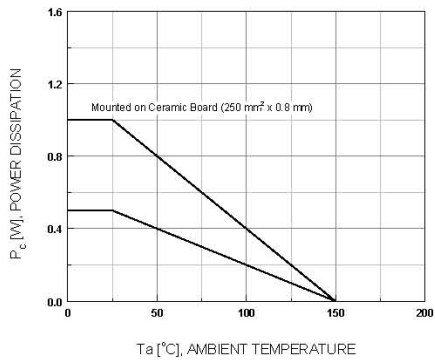
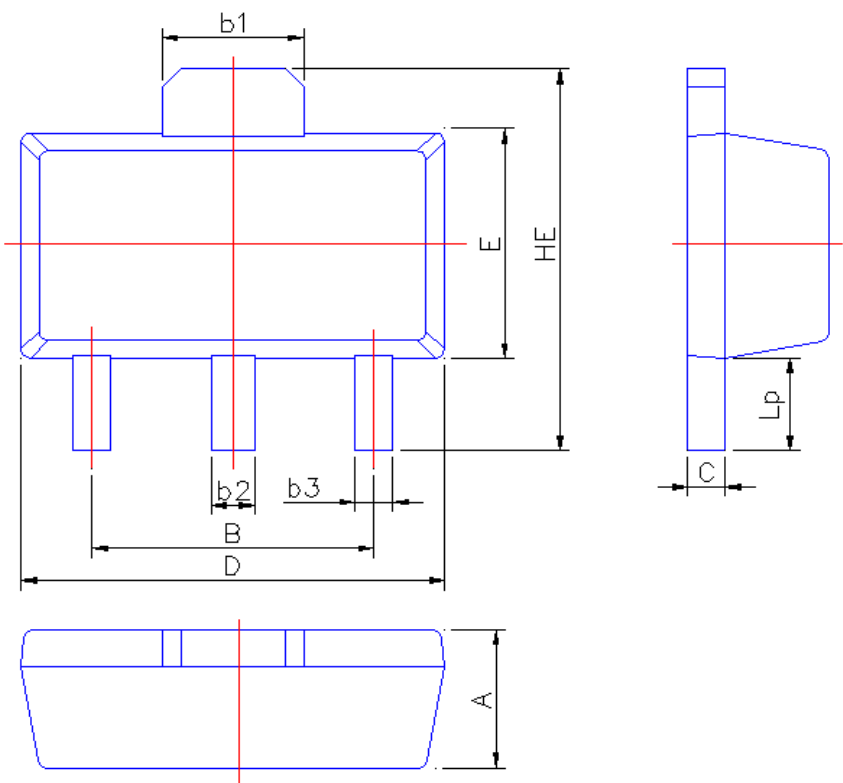


Figure 5. Power Derating



PACKAGE MECHANICAL DATA



SOT-89

Symbol	Dimension in Millimeters	
	Min	Max
A	1.40	1.60
B	2.95	3.05
b1	1.45	1.70
b2	0.45	0.60
b3	0.35	0.50
C	0.35	0.50
D	4.40	4.60
E	2.35	2.55
HE	3.90	4.40
Lp	0.90	1.10

REELSPECIFICATION

P/N	PKG	QTY
2SC2881-x-MS	SOT-89	1000

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