## MSKSEMI















**ESD** 

TVS

TSS

MOV

**GDT** 

**PLED** 

# Brodnet data speet

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#### **FEATURES**

- High Collector Current
- Complementary to SS8050

#### **SOT-89**





3. EMITTER

Symbol	Parameter	Value	Unit
V <sub>CBO</sub>	Collector-Base Voltage	-40	V
V <sub>CEO</sub>	Collector-Emitter Voltage	-25	V
V <sub>EBO</sub>	Emitter-Base Voltage -5		V
Ic	Collector Current -Continuous	-1.5	Α
Pc	Collector Power Dissipation	0.5	W
R <sub>OJA</sub>	Thermal Resistance From Junction To Ambient	250	°C/W
TJ	Junction Temperature	150	°C
T <sub>stg</sub>	Storage Temperature	-55~150	$^{\circ}$

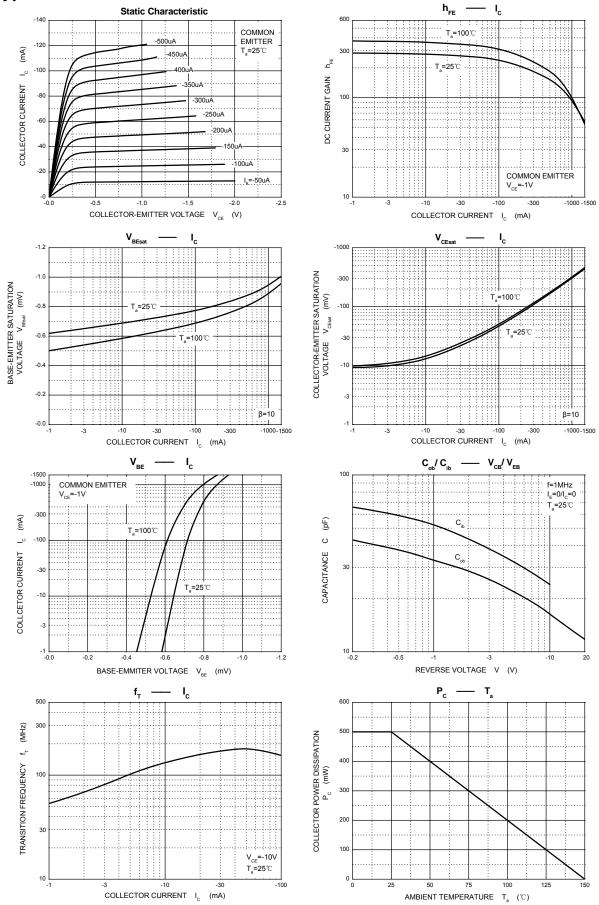
#### **ELECTRICAL CHARACTERISTICS (T<sub>a</sub>=25°C unless otherwise specified)**

Parameter	Symbol	Test conditions	Min	Тур	Max	Unit
Collector-base breakdown voltage	V <sub>(BR)CBO</sub>	I <sub>C</sub> =-100μA, I <sub>E</sub> =0	-40			V
Collector-emitter breakdown voltage	V <sub>(BR)CEO</sub>	I <sub>C</sub> =-1mA, I <sub>B</sub> =0	-25			V
Emitter-base breakdown voltage	V <sub>(BR)EBO</sub>	I <sub>E</sub> =-100μA, I <sub>C</sub> =0	-5			V
Collector cut-off current	I <sub>CBO</sub>	I <sub>CBO</sub> V <sub>CB</sub> =-40V, I <sub>E</sub> =0			-100	nA
Emitter cut-off current	I <sub>EBO</sub>	V <sub>EB</sub> =-5V, I <sub>C</sub> =0			-100	nA
DC current gain	h <sub>FE(1)</sub>	V <sub>CE</sub> =-1V, I <sub>C</sub> =-100mA	120		400	
DC Current gam	h <sub>FE(2)</sub>	V <sub>CE</sub> =-1V, I <sub>C</sub> =-800mA	40			
Collector-emitter saturation voltage	V <sub>CE(sat)</sub>	I <sub>C</sub> =-800mA, I <sub>B</sub> =-80mA			-0.5	V
Base-emitter saturation voltage	V <sub>BE(sat)</sub>	I <sub>C</sub> =-800mA, I <sub>B</sub> =-80mA			-1.2	V
Base-emitter voltage	$V_{BE}$	V <sub>CE</sub> =-1V, I <sub>C</sub> =-10mA			-1	V
Transition frequency	f <sub>T</sub>	V <sub>CE</sub> =-10V,I <sub>C</sub> =-50mA , f=30MHz	100			MHz
Collector output capacitance	Cob	V <sub>CB</sub> =-10V, I <sub>E</sub> =0, f=1MHz			20	pF

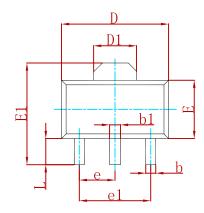
#### **CLASSIFICATION OF** h<sub>FE(1)</sub>

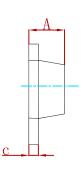
RANK	L	Н	J
RANGE	120 - 200	200 - 350	300 - 400

#### **Typical Characteristics**



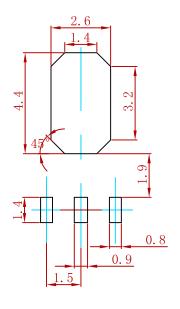
#### **PACKAGE MECHANICAL DATA**





Symbol	Dimensions In Millimeters		Dimensions In Inches		
Symbol	Min	Max	Min	Max	
Α	1.400	1.600	0.055	0.063	
b	0.320	0.520	0.013	0.020	
b1	0.400	0.580	0.016	0.023	
С	0.350	0.440	0.014	0.017	
D	4.400	4.600	0.173	0.181	
D1	1.550 REF.		0.061 REF.		
E	2.300	2.600	0.091	0.102	
E1	3.940	4.250	0.155	0.167	
е	1.500 TYP.		0.060 TYP.		
e1	3.000 TYP.		0.118 TYP.		
L	0.900	1.200	0.035	0.047	

## Suggested Pad Layout



#### Note:

- 1.Controlling dimension:in millimeters.
- 2.General tolerance:±0.05mm.
- 3. The pad layout is for reference purposes only.

#### **REEL SPECIFICATION**

P/N	PKG	QTY
SS8550	SOT-89	1000





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