

SOT-23


- 1. BASE
- 2. EMITTER
- 3. COLLECTOR

MARKING: 1AM
Features

- As complementary type the PNP transistor S9015 is recommended
- Epitaxial planar die construction

Maximum Ratings

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

Symbol	Parameter	Value	Units
V_{CB0}	Collector-Base Voltage	50	V
V_{CE0}	Collector-Emitter Voltage	45	V
V_{EB0}	Emitter-Base Voltage	5	V
I_C	Collector Current -Continuous	100	mA
P_C	Total Device Dissipation	200	mW
$R_{\theta JA}$	Thermal Resistance Junction to Ambient	625	°C/W
T_J	Junction Temperature	150	°C
T_{stg}	Storage Temperature	-55 to +150	°C

Electrical Characteristics

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

Parameter	Symbols	Test Condition	Limits		Unit
			Min	Max	
Collector-base breakdown voltage	$V(BR)_{CBO}$	$I_C=100\mu A, I_E=0$	50		V
Collector-emitter breakdown voltage	$V(BR)_{CEO}$	$I_C=0.1mA, I_B=0$	45		V
Emitter-base breakdown voltage	$V(BR)_{EBO}$	$I_E=100\mu A, I_C=0$	5		V
Collector cut-off current	I_{CEO}	$V_{CE}=35V, I_B=0$		100	nA
Collector cut-off current	I_{CBO}	$V_{CB}=50V, I_E=0$		100	nA
Emitter cut-off current	I_{EBO}	$V_{EB}=3V, I_C=0$		100	nA
DC current gain	h_{FE}	$V_{CE}=5V, I_C=1mA$	200	1000	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=100mA, I_B=5mA$		0.30	V
Base -emitter saturation voltage	$V_{BE(sat)}$	$I_C=100mA, I_B=5mA$		1.00	V
Transition frequency	f_T	$V_{CE}=5V, I_C=10mA, f=30MHz$	150		MHz

CLASSIFICATION OF $h_{FE(1)}$

RANK	L	H
RANGE	200-450	450-1000

