



Micro Commercial Components
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MMBT1015-L MMBT1015-H

Features

- Lead Free Finish/RoHS Compliant ("P" Suffix designates RoHS Compliant. See ordering information)
- Collector-Emitter Voltage: $V_{CE0} = -50V$
- Collector current up to 150mA
- High Hfe linearity
- Complement to MMBT1815
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
- Marking: BA
- Suffix "HF" is used to distinguish halogen free products from traditional halogen containing products

Maximum Ratings

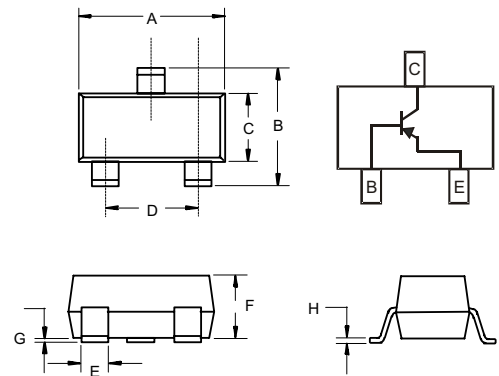
- Junction Temperature: $-55^{\circ}C \sim 125^{\circ}C$
- Storage Temperature: $-55^{\circ}C$ to $+150^{\circ}C$

ABSOLUTE MAXIMUM RATINGS $T_a = 25^{\circ}C$ Unless Otherwise Specified

PARAMETERS	SYMBOL	VALUE	UNIT
Collector-base voltage	V_{CBO}	-50	V
Collector-emitter voltage	V_{CEO}	-50	V
Emitter-base voltage	V_{EBO}	-5	V
Collector dissipation	P_C	250	mW
Collector current	I_C	-150	mA
Base Current	I_B	-50	mA

PNP EPITAXIAL SILICON TRANSISTOR

SOT-23



DIM	DIMENSIONS				NOTE
	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	.106	.122	2.70	3.10	
B	.093	.108	2.35	2.75	
C	.067	.083	1.70	2.10	
D	.047	.059	1.20	1.50	
E	.014	.022	0.35	0.55	
F	.041	.053	1.05	1.35	
G	-----	.004	-----	.10	
H	.003	.008	.08	.20	

ELECTRICAL CHARACTERISTICS Ta=25 °C Unless Otherwise Specified

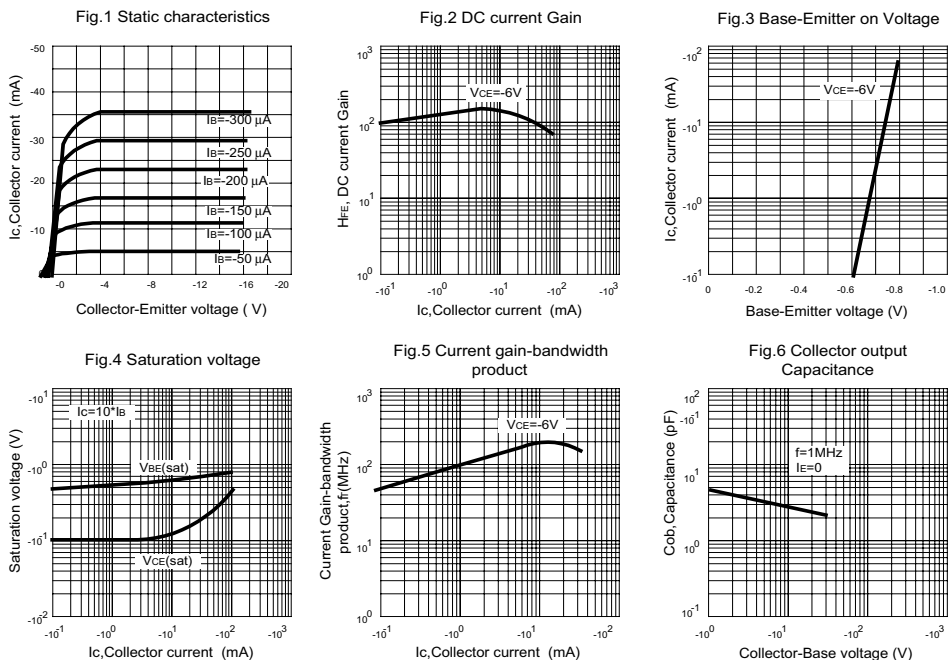
PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	BVCBO	Ic=-100μA,IE=0	-50			V
Collector-emitter breakdown voltage	BVCEO	Ic=-10mA,IB=0	-50			V
Emitter-base breakdown voltage	BVEBO	IE=-10μA,Ic=0	-5			V
Collector cut-off current	ICBO	VCB=-50V,IE=0			-100	nA
Emitter cut-off current	IEBO	VEB=-5V,Ic=0			-100	nA
DC current gain(note)	hFE1	VCE=-6V,Ic=-2mA	70		400	
	hFE2	VCE=-6V,Ic=-150mA	25			
Collector-emitter saturation voltage	VCE(sat)	Ic=-100mA,IB=-10mA		-0.1	-0.3	V
Base-emitter saturation voltage	VBE(sat)	Ic=-100mA,IB=-10mA			-1.1	V
Current gain bandwidth product	fT	VCE=-10V,Ic=-1mA	80			MHz
Output capacitance	Cob	VCB=-10V,IE=0,f=1MHz		4.0	7.0	pF

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Noise Figure	NF	Ic=-0.1mA,VCE=-6V RG=1kΩ,f=100Hz		0.5	6	dB

CLASSIFICATION OF hFE1

RANK	L	H
RANGE	130-200	200-400

TYPICAL CHARACTERISTIC CURVES





TM

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Ordering Information :

Device	Packing
Part Number-TP	Tape&Reel; 3Kpcs/Reel

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