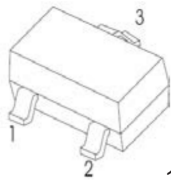


FEATURES

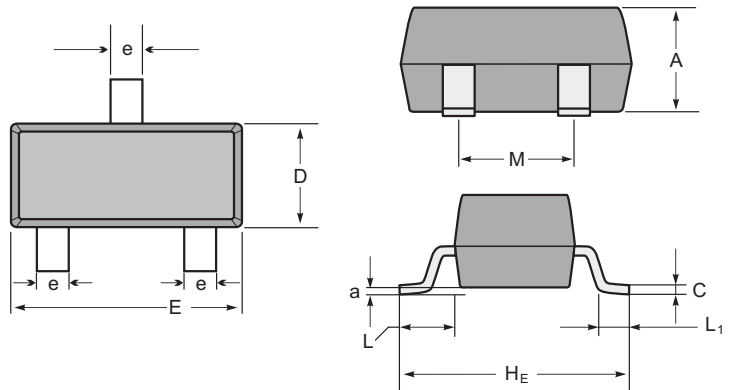
- High Collector Current



1.BASE
2.EMITTER
3.COLLECTOR

Marking

Type number	Marking code
MMBT8550D	Y2



SOT-23 mechanical data

UNIT		A	C	D	E	H _E	e	M	L	L ₁	a
mm	max	1.1	0.15	1.4	3.0	2.6	0.5	1.95	0.55	0.36	0.0
	min	0.9	0.08	1.2	2.8	2.2	0.3	1.7	(ref)	(ref)	0.15
mil	max	43	6	55	118	102	20	77	22	14	0.0
	min	35	3	47	110	87	12	67	(ref)	(ref)	6

MAXIMUM RATINGS (Ta=25°C unless otherwise noted)

Parameter	Symbol	Value	Unit
Collector–Base Voltage	V _{CBO}	-40	V
Collector–Emitter Voltage	V _{CEO}	-25	V
Emitter–Base Voltage	V _{EBO}	-5	V
Collector Current — Continuous	I _C	-1.5	A
Collector Dissipation	P _C	200	mW
Thermal Resistance From Junction To Ambient	R _{thJA}	625	°C/W
Operation Junction and Storage Temperature Range	T _J , T _{stg}	-55~+150	°C

MMBT8550D

CLASSIFICATION OF $h_{FE(1)}$

RANK	L	H	J
RANGE	120-200	200-350	300-400
MARKING	Y2		

ELECTRICAL CHARACTERISTICS (TA = 25°C unless otherwise noted.)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C = -100\mu A, I_E = 0$	-40			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C = -0.1\text{ mA}, I_B = 0$	-25			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E = -100\mu A, I_C = 0$	-5			V
Collector cut-off current	I_{CBO}	$V_{CB} = -40V, I_E = 0$			-0.1	μA
Collector cut-off current	I_{CEO}	$V_{CE} = -20V, I_B = 0$			-0.1	μA
Emitter cut-off current	I_{EBO}	$V_{EB} = -5V, I_C = 0$			-0.1	μA
DC current gain	h_{FE1}	$V_{CE} = -1V, I_C = -100\text{ mA}$	120		400	
	h_{FE2}	$V_{CE} = -1V, I_C = -800\text{ mA}$	40			
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = -800\text{ mA}, I_B = -80\text{ mA}$			-0.5	V
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_C = -800\text{ mA}, I_B = -80\text{ mA}$			-1.2	V
Base-emitter voltage	V_{BE}	$V_{BE} = -1V, I_C = -10\text{ mA}$			-1	V
Transition frequency	f_T	$V_{CE} = -10V, I_C = -50\text{ mA}, f = 30\text{ MHz}$	100			MHz
Collector output capacitance	C_{ob}	$V_{CB} = -10V, I_E = 0, f = 1\text{ MHz}$			20	

RATING AND CHARACTERISTIC CURVES (MMBT8550D)

