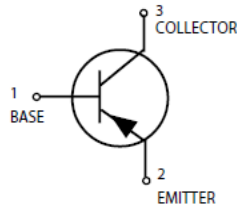
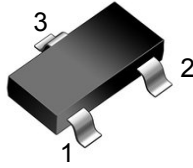


SOT-23



MARKING: 2T

Features

As complementary type the NPN transistor PMBT4401 is recommended
 Epitaxial planar die construction
 Halogen free and RoHS compliant

Mechanical Data

SOT-23 Small Outline Plastic Package
 Epoxy UL: 94V-0

Summary of Packing Options

Package	Packing Description	Packing Quantity	Industry Standard
SOT-23	Tape/Reel,7" reel	3000	EIA-481-1

Maximum Ratings & Thermal Characteristics

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

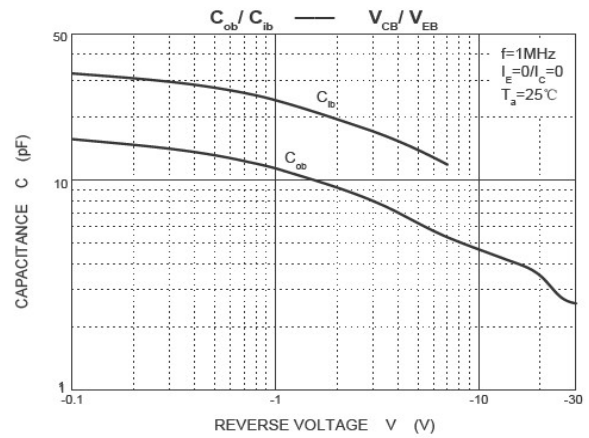
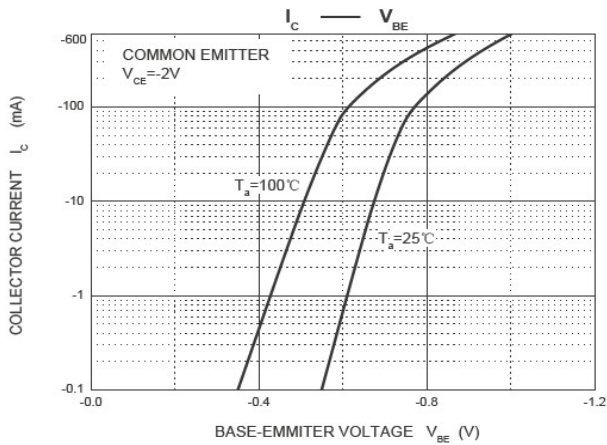
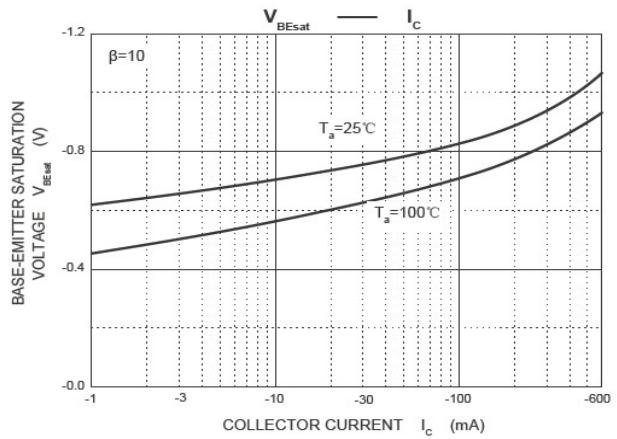
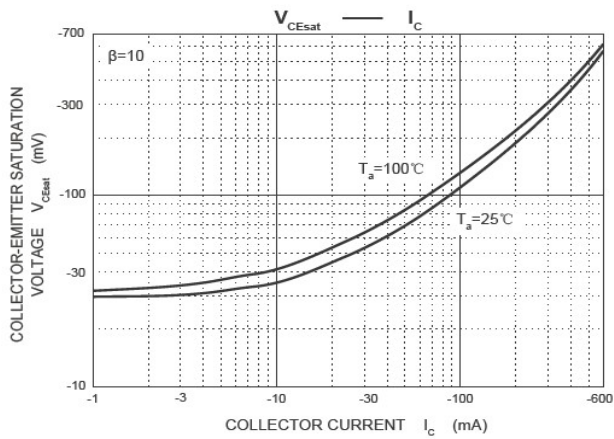
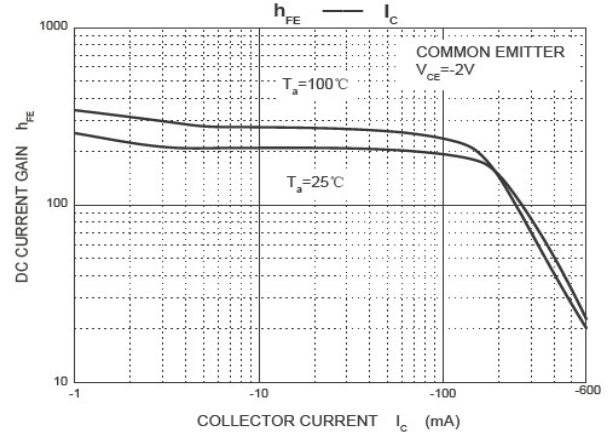
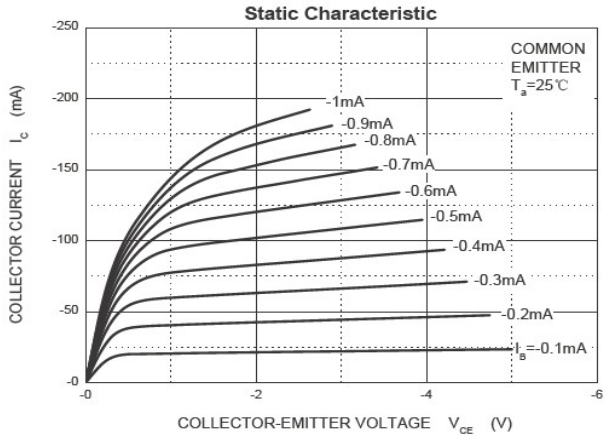
Parameters	Symbol	Value	Unit
Collector-Base Voltage	V _{CB0}	-40	V
Collector-Emitter Voltage	V _{CEO}	-40	V
Emitter -Base Voltage	V _{EBO}	-5	V
Collector Current-Continuous	I _C	-600	mA
Collector Power Dissipation	P _C	300	mW
Junction Temperature	T _j	150	°C
Storage Temperature	T _{stg}	-55-+150	°C
Thermal resistance From junction to ambient	R _{θJA}	417	°C/W

Electrical Characteristics

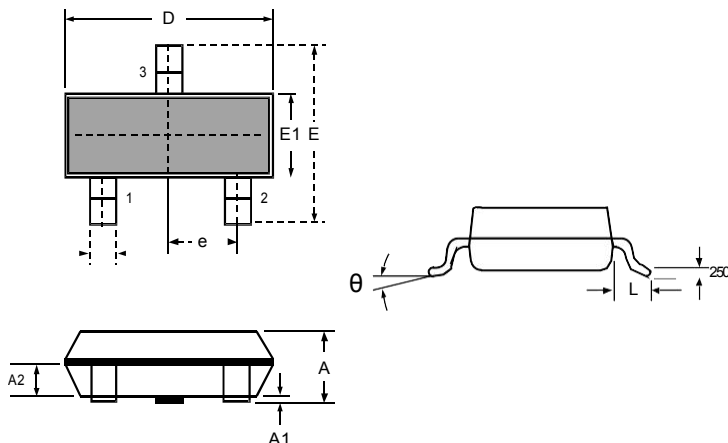
(Ratings at 25°C ambient temperature unless otherwise specified).

Parameter	Symbols	Test Condition	Limits		Unit
			Min	Max	
Collector-base breakdown voltage	V(BR)CBO	I _C =-100uA, I _E =0	-40		V
Collector-emitter breakdown voltage	V(BR)CEO	I _C =-1mA, I _B =0	-40		V
Emitter-base breakdown voltage	V(BR)EBO	I _E =-100uA, I _C =0	-5		V
Collector cut-off current	I _{CBO}	V _{CB} =-35V, I _E =0		-100	nA
Collector cut-off current	I _{CEX}	V _{CE} =-35V, V _{EB(off)} =-0.4V		-100	nA
Emitter cut-off current	I _{EBO}	V _{EB} =-4V, I _C =0		-100	nA
DC current gain	hFE(1)	V _{CE} =-1V, I _C =-0.1mA	30		
	hFE(2)	V _{CE} =-1V, I _C =-1mA	60		
	hFE(3)	V _{CE} =-1V, I _C =-10mA	100		
	hFE(4)	V _{CE} =-2V, I _C =-150mA	100	300	
	hFE(5)	V _{CE} =-2V, I _C =-500mA	20		
Collector-emitter saturation voltage	V _{CE(sat)}	I _C =-150mA, I _B =-15mA		-0.40	V
		I _C =-500mA, I _B =-50mA		-0.75	V
Base -emitter saturation voltage	V _{BE(sat)}	I _C =-150mA, I _B =-15mA		-0.95	V
		I _C =-500mA, I _B =-50mA		-1.30	V
Transition frequency	f _T	V _{CE} =-10V, I _C =-20mA, f=100MHz	200		MHz
Delay time	t _d	V _{CC} =-30V, V _{BE(off)} =-0.5V, I _C =-150mA, I _{B1} =-15mA		15	nS
Rise time	t _r			20	nS
Storage time	t _s	V _{CC} =-30V, I _C =-150mA, I _{B1} =I _{B2} =-15mA		225	nS
Fall time	t _f			60	nS

Ratings and Characteristic Curves



Package Outline Dimensions: SOT-23



DIMENSIONS

SYMBOL	MILLIMETER		INCHES	
	MIN	MAX	MIN	MAX
A	0.900	1.150	0.035	0.045
A1	0.000	0.100	0.000	0.004
A2	0.900	1.050	0.035	0.041
D	2.800	3.000	0.110	0.118
b	0.300	0.500	0.012	0.020
E	2.250	2.550	0.089	0.100
E1	1.200	1.400	0.047	0.055
e	0.950 BSC		0.037 BSC	
L	0.300	0.500	0.012	0.020
θ	0	8°	0	8°