



TRANSISTPR(PNP)

FEATURES

- Epitaxial planar die construction
- Complementary NPN Type available(MMBT2222A)

Marking: 2F

MAXIMUM RATINGS ($T_A=25^{\circ}\text{C}$ unless otherwise noted)

Symbol	Parameter	Value	Units
V_{CBO}	Collector-Base Voltage	-60	V
V_{CEO}	Collector-Emitter Voltage	-60	V
V_{EBO}	Emitter-Base Voltage	-5	V
I_{C}	Collector Current -Continuous	-600	mA
P_{D}	Total Device Dissipation	250	mW
$R_{\theta\text{JA}}$	Thermal Resistance Junction to Ambient	500	$^{\circ}\text{C}/\text{W}$
T_{J}	Junction Temperature	150	$^{\circ}\text{C}$
T_{stg}	Storage Temperature	-55 to +150	$^{\circ}\text{C}$

SOT-23



1. BASE
2. EMITTER
3. COLLECTOR

ELECTRICAL CHARACTERISTICS ($T_{\text{amb}}=25^{\circ}\text{C}$ unless otherwise specified)

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	$V_{(\text{BR})\text{CBO}}$	$I_{\text{C}}=-10\mu\text{A}, I_{\text{E}}=0$	-60			V
Collector-emitter breakdown voltage	$V_{(\text{BR})\text{CEO}^*}$	$I_{\text{C}}=-10\text{mA}, I_{\text{B}}=0$	-60			V
Emitter-base breakdown voltage	$V_{(\text{BR})\text{EBO}}$	$I_{\text{E}}=-10\mu\text{A}, I_{\text{C}}=0$	-5			V
Collector cut-off current	I_{CBO}	$V_{\text{CB}}=-50\text{V}, I_{\text{E}}=0$			-20	nA
Base cut-off current	I_{EBO}	$V_{\text{CE}}=-3\text{V}, I_{\text{C}}=0$			-10	nA
Collector cut-off current	I_{CEX}	$V_{\text{CE}}=-30\text{V}, V_{\text{BE}(\text{off})}=-0.5\text{V}$			-50	nA
DC current gain	$h_{\text{FE}(1)}$	$V_{\text{CE}}=-10\text{V}, I_{\text{C}}=-150\text{mA}$	100		300	
	$h_{\text{FE}(2)}$	$V_{\text{CE}}=-10\text{V}, I_{\text{C}}=-0.1\text{mA}$	75			
	$h_{\text{FE}(3)}$	$V_{\text{CE}}=-10\text{V}, I_{\text{C}}=-1\text{mA}$	100			
	$h_{\text{FE}(4)}$	$V_{\text{CE}}=-10\text{V}, I_{\text{C}}=-10\text{mA}$	100			
	$h_{\text{FE}(5)}$	$V_{\text{CE}}=-10\text{V}, I_{\text{C}}=-500\text{mA}$	50			
Collector-emitter saturation voltage	$V_{\text{CE}(\text{sat})}^*$	$I_{\text{C}}=-150\text{mA}, I_{\text{B}}=-15\text{mA}$			-0.4	V
	$V_{\text{CE}(\text{sat})}^*$	$I_{\text{C}}=-500\text{mA}, I_{\text{B}}=-50\text{mA}$			-1.6	V
Base-emitter saturation voltage	$V_{\text{BE}(\text{sat})}^*$	$I_{\text{C}}=-150\text{mA}, I_{\text{B}}=-15\text{mA}$			-1.3	V
	$V_{\text{BE}(\text{sat})}^*$	$I_{\text{C}}=-500\text{mA}, I_{\text{B}}=-50\text{mA}$			-2.6	V
Transition frequency	f_{T}	$V_{\text{CE}}=-20\text{V}, I_{\text{C}}=-50\text{mA}, f=100\text{MHz}$	200			MHz
Delay time	t_{d}	$V_{\text{CE}}=-30\text{V}, I_{\text{C}}=-150\text{mA}, I_{\text{B1}}=-15\text{mA}$			10	nS
Rise time	t_{r}				25	nS
Storage time	t_{s}	$V_{\text{CE}}=-6\text{V}, I_{\text{C}}=-150\text{mA}, I_{\text{B1}}=-I_{\text{B2}}=-15\text{mA}$			225	nS
Fall time	t_{f}				60	nS

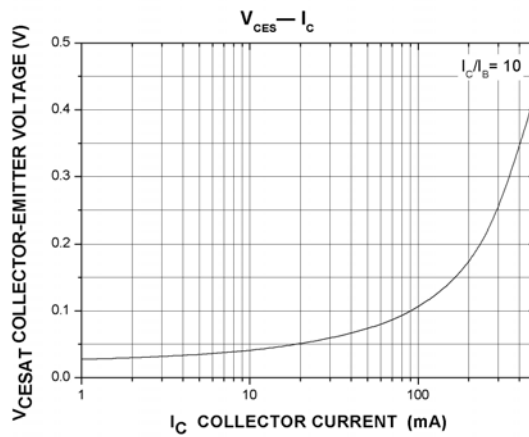
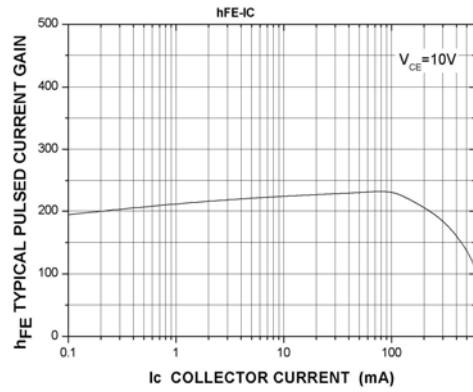
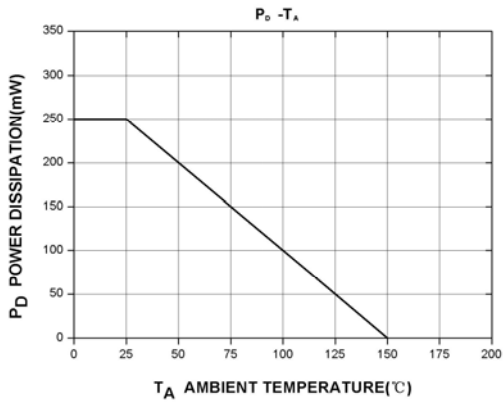
*Pulse test: $t_{\text{p}} \leq 300\mu\text{S}$, $\delta \leq 0.02$.

1



Typical Characteristics

MMBT2907A



X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for [Bipolar Transistors - BJT category](#):

Click to view products by [Jinyu manufacturer](#):

Other Similar products are found below :

[619691C](#) [MCH4017-TL-H](#) [MJ15024/WS](#) [MJ15025/WS](#) [BC546/116](#) [BC556/FSC](#) [BC557/116](#) [BSW67A](#) [HN7G01FU-A\(T5L,F,T](#)
[NJVMJD148T4G](#) [NSVMMBT6520LT1G](#) [NTE187A](#) [NTE195A](#) [NTE2302](#) [NTE2330](#) [NTE2353](#) [NTE316](#) [IMX9T110](#) [NTE63](#) [NTE65](#)
[C4460](#) [SBC846BLT3G](#) [2SA1419T-TD-H](#) [2SA1721-O\(TE85L,F\)](#) [2SA1727TLP](#) [2SA2126-E](#) [2SB1202T-TL-E](#) [2SB1204S-TL-E](#) [2SC5488A-](#)
[TL-H](#) [2SD2150T100R](#) [SP000011176](#) [FMC5AT148](#) [2N2369ADCSM](#) [2SB1202S-TL-E](#) [2SC2412KT146S](#) [2SC4618TLN](#) [2SC5490A-TL-H](#)
[2SD1816S-TL-E](#) [2SD1816T-TL-E](#) [CMXT2207 TR](#) [CPH6501-TL-E](#) [MCH4021-TL-E](#) [BC557B](#) [TTC012\(Q\)](#) [BULD128DT4](#) [JANTX2N3810](#)
[Jantx2N5416](#) [US6T6TR](#) [KSF350](#) [068071B](#)