


**SOT-23**


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

**MARKING: 1P**
**Features**

- Epitaxial planar die construction
- Complementary PNP Type available (**MMBT2907A**)

**Maximum Ratings**

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

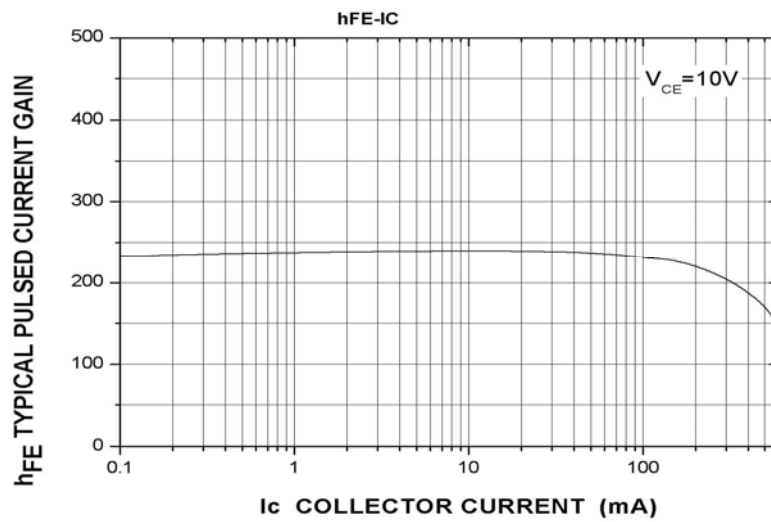
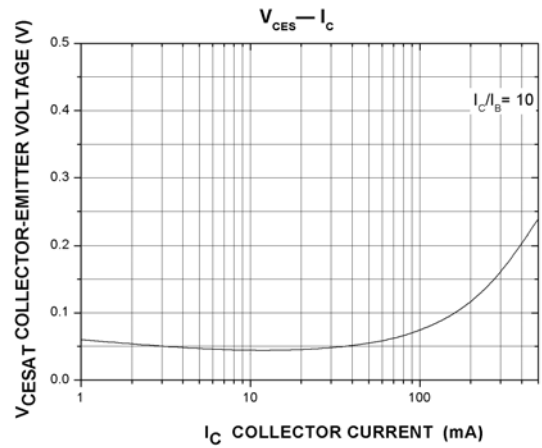
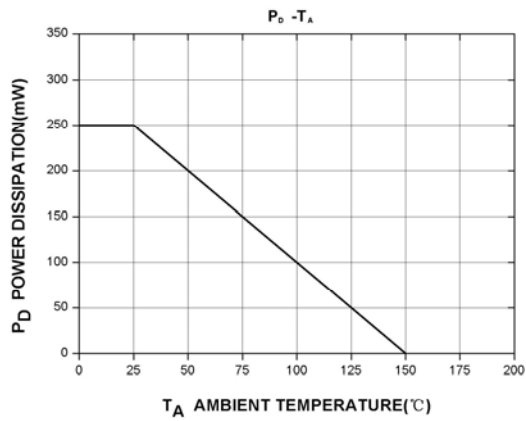
Symbol	Parameter	Value	Units
$V_{CBO}$	Collector-Base Voltage	70	V
$V_{CEO}$	Collector-Emitter Voltage	40	V
$V_{EBO}$	Emitter-Base Voltage	6	V
$I_C$	Collector Current -Continuous	600	mA
$P_C$	Total Device Dissipation	250	mW
$R_{\theta JA}$	Thermal Resistance Junction to Ambient	500	°C/W
$T_J$	Junction Temperature	150	°C
$T_{stg}$	Storage Temperature	-55 to +150	°C

**Electrical Characteristics**

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

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C = 10\mu A, I_E = 0$	75			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}^*$	$I_C = 10mA, I_B = 0$	40			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E = 10\mu A, I_C = 0$	6			V
Collector cut-off current	$I_{CBO}$	$V_{CB} = 60V, I_E = 0$			0.01	$\mu A$
Collector cut-off current	$I_{CEX}$	$V_{CE} = 30V, V_{BE(off)} = 3V$			0.01	$\mu A$
Emitter cut-off current	$I_{EBO}$	$V_{EB} = 3V, I_C = 0$			0.1	$\mu A$
DC current gain	$h_{FE(1)}^*$	$V_{CE} = 10V, I_C = 150mA$	100		300	
	$h_{FE(2)}$	$V_{CE} = 10V, I_C = 0.1mA$	40			
	$h_{FE(3)}^*$	$V_{CE} = 10V, I_C = 500mA$	42			
Collector-emitter saturation voltage	$V_{CE(sat)}^*$	$I_C = 500mA, I_B = 50mA$ $I_C = 150mA, I_B = 15mA$			1 0.3	V
Base-emitter saturation voltage	$V_{BE(sat)}^*$	$I_C = 500mA, I_B = 50mA$ $I_C = 150mA, I_B = 15mA$			2.0 1.2	V
Transition frequency	$f_T$	$V_{CE} = 20V, I_C = 20mA,$ $f = 100MHz$	300			MHz
Delay time	$t_d$	$V_{CC} = 30V, V_{BE(off)} = -0.5V$			10	nS
Rise time	$t_r$	$I_C = 150mA, I_{B1} = 15mA$			25	nS
Storage time	$t_s$	$V_{CC} = 30V, I_C = 150mA$			225	nS
Fall time	$t_f$	$I_{B1} = -I_{B2} = 15mA$			60	nS

 \*pulse test: Pulse Width  $\leq 300\mu s$ , Duty Cycle  $\leq 2.0\%$ .



## 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 [Bourne 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](#)