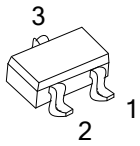
MMBTA42/43

NPN SILICON TRANSISTOR

HIGH VOLTAGE TRANSISTOR



SOT-23
(JEDEC TO-236)

■ DESCRIPTION

The UTC **MMBTA42/43** are high voltage transistors, designed for telephone switch and high voltage switch.

■ FEATURES

* Collector-Emitter voltage: V_{CEO}=300V(MMBTA42)
* Collector-Emitter voltage: V_{CEO}=200V(MMBTA43)
* High current gain
* Collector Dissipation: $P_{c\ (max)}$ =350mW

■ ORDERING INFORMATION

Ordering Number	Package	Pin Assignment			Packing
		1	2	3	
MMBTA42G-AE3-R	SOT-23	E	B	C	Tape Reel
MMBTA43G-AE3-R	SOT-23	E	B	C	Tape Reel

Note: Pin Assignment: E: Emitter B: Base C: Collector

MMBTA42G-AE3-R (1)Packing Type (2)Package Type (3)Green Package	(1) R: Tape Reel (2) AE3: SOT-23 (3) G: Halogen Free and Lead Free

■ MARKING

MMBTA42	MMBTA43
1DG	1FG

■ ABSOLUTE MAXIMUM RATINGS (T_A=25°C, unless otherwise specified)

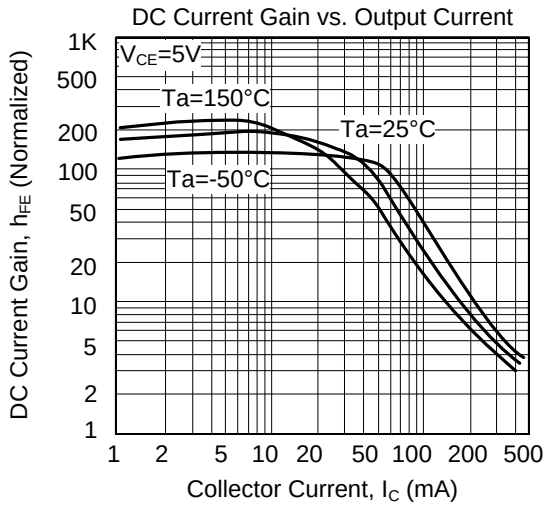
PARAMETER		SYMBOL	RATINGS	UNIT
Collector-Base Voltage	MMBTA42	V_{CBO}	300	V
	MMBTA43		200	
Collector-Emitter Voltage	MMBTA42	V_{CEO}	300	V
	MMBTA43		200	
Emitter-Base Voltage		V_{EBO}	6	V
Collector Dissipation (Ta=25°C)		P_C	350	mW
Collector Current		I_C	500	mA
Junction Temperature		T_J	+150	°C
Storage Temperature		T_{STG}	-55 ~ +150	°C

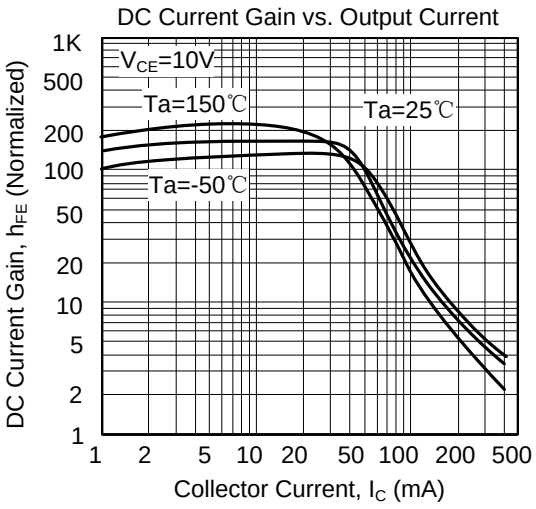
Note: Absolute maximum ratings are those values beyond which the device could be permanently damaged. Absolute maximum ratings are stress ratings only and functional device operation is not implied

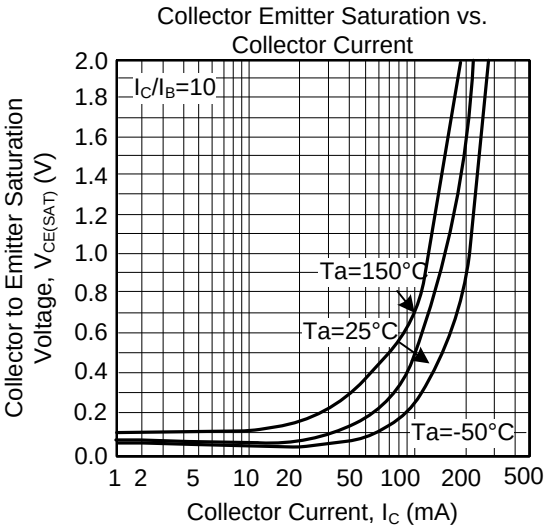
■ ELECTRICAL CHARACTERISTICS (T_J=25°C, unless otherwise specified)

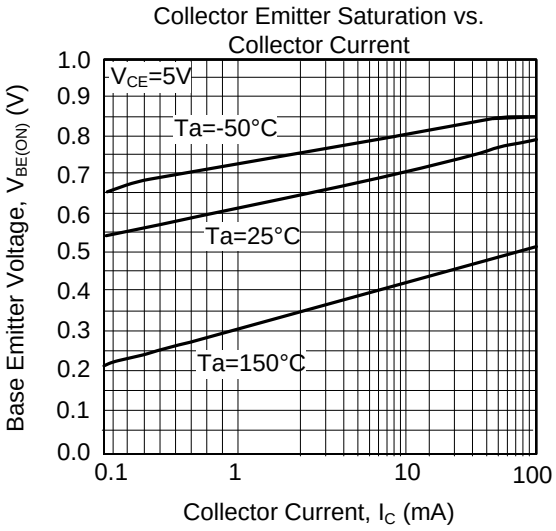
PARAMETER		SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Collector-Base Breakdown Voltage	MMBTA42	BV_{CBO}	I_C=100μA, I_E=0	300			V
	MMBTA43			200			
Collector-Emitter Breakdown Voltage	MMBTA42	BV_{CEO}	I_C =1mA, I_B=0	300			V
	MMBTA43			200			
Emitter-Base Breakdown Voltage		BV_{EBO}	I_E=100μA, I_C =0	6			V
Collector-Emitter Saturation Voltage		$V_{CE(SAT)}$	I_C =20mA, I_B=2mA			0.2	V
Base-Emitter Saturation Voltage		$V_{BE(SAT)}$	I_C =20mA, I_B=2mA			0.90	V
Collector Cut-Off Current	MMBTA42	I_{CBO}	V_{CB}=200V, I_E=0			100	nA
	MMBTA43		V_{CB}=160V, I_E=0			100	
Emitter Cut-Off Current	MMBTA42	I_{EBO}	V_{EB}=6V, I_C =0			100	nA
	MMBTA43		V_{EB}=4V, I_C =0			100	
DC Current Gain		h_{FE}	V_{CE}=10V, I_C =1mA	80			
			V_{CE}=10V, I_C =10mA	80		300	
			V_{CE}=10V, I_C =30mA	80			
Current Gain Bandwidth Product		f_T	V_{CE}=20V, I_C=10mA f =100MHz	50			MHz
Collector Base Capacitance	MMBTA42	C_{cb}	V_{CB}=20V, I_E=0, f=1MHz			3	pF
	MMBTA43					4	

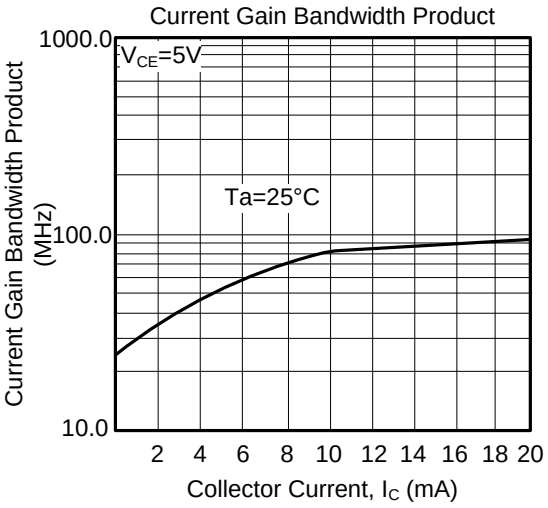
■ TYPICAL CHARACTERISTICS

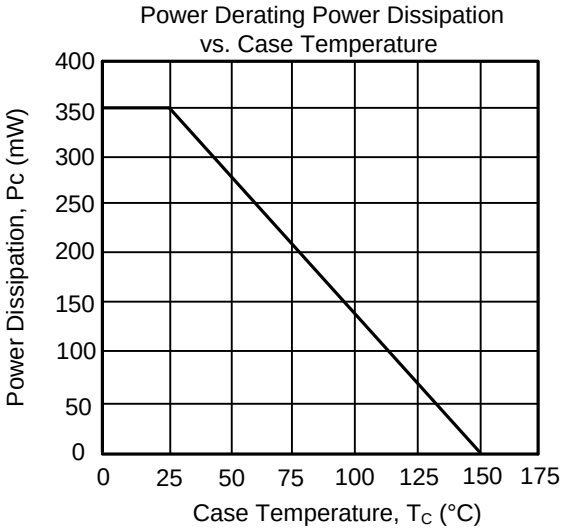












X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for Bipolar Transistors - BJT ***category:***

Click to view products by Unisonic ***manufacturer:***

Other Similar products are found below :

BC559C MCH4017-TL-H MMBT-2369-TR BC546/116 NJVMJD148T4G NTE16 NTE195A IMX9T110 2N4401-A 2N6728 2SA1419T-TD-H 2SB1204S-TL-E 2SC5488A-TL-H FMC5AT148 2N2369ADCSM 2N2907A 2N3904-NS 2N5769 2SC4618TLN CPH6501-TL-E US6T6TR BAX18/A52R BC556/112 IMZ2AT108 MMST8098T146 MCH6102-TL-E BC846B-13-F 2N3879 30A02MH-TL-E NTE13 NTE282 NTE323 NTE350 NTE81 JANTX2N2920L JANSR2N2907AUB CMLT3946EG TR SNSS40600CF8T1G CMLT3906EG TR GRP-DATA-JANS2N2907AUB GRP-DATA-JANS2N2222AUA MMDT3946FL3-7 2N4240 JANS2N3019 MSB30KH-13 2N2221AUB 2SD1815T-TL-E 2N6678 2N2907Ae4 JAN2N3507