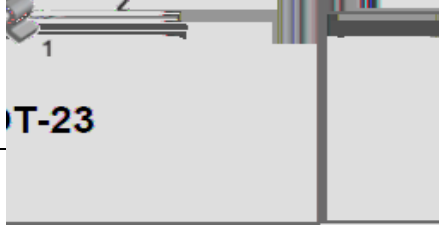
PMMT491A



NPN Transistor

Features

- Epoxy meets UL-94 V-0 flammability rating
- Halogen free available upon request by adding suffix ”HF”
- Moisture Sensitivity Level 1
- High Conductance
- Surface mount package ideally Suited for Automatic Insertion

Mechanical Data

- **Package**: SOT-23

Molding compound meets UL 94 V-0 flammability rating

- Tin plated leads, solderable per J-STD-002 and JESD22-B102
- **Marking**: 9A

■ **Maximum Ratings** (Ta=25 unless otherwise noted)

Item	Symbol	Unit	Value
Collector-Base Voltage	V_{CBO}	V	40
Collector-Emitter Voltage	V_{CEO}	V	40
Emitter-Base Voltage	V_{EBO}	V	5
Collector Current	I_C	A	1
Collector Power Dissipation	Pc	mW	300
Junction Temperature	Tj		150
Storage Temperature	T_{stg}		-55 to +150

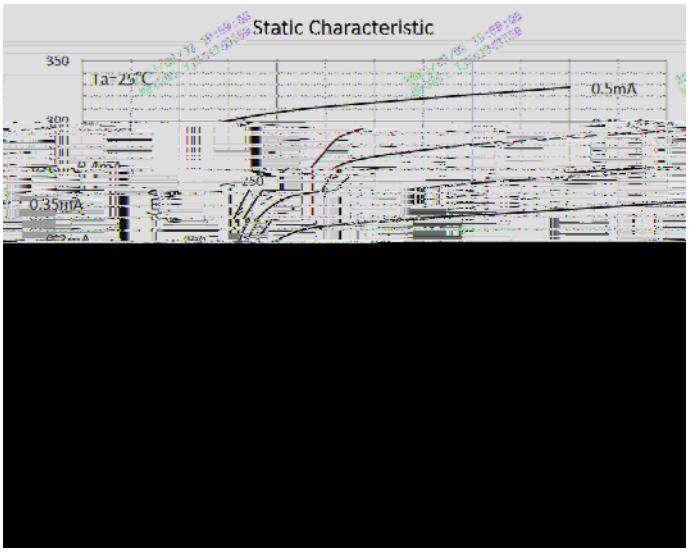
■ **Ordering Information** (Example)

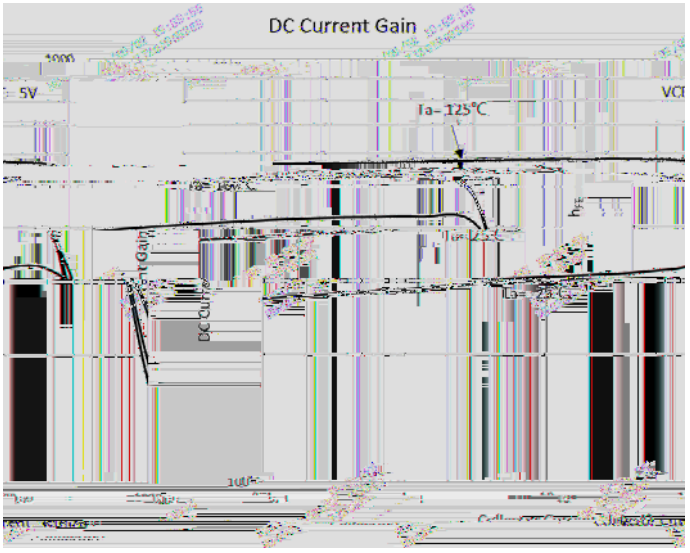
PREFERED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)

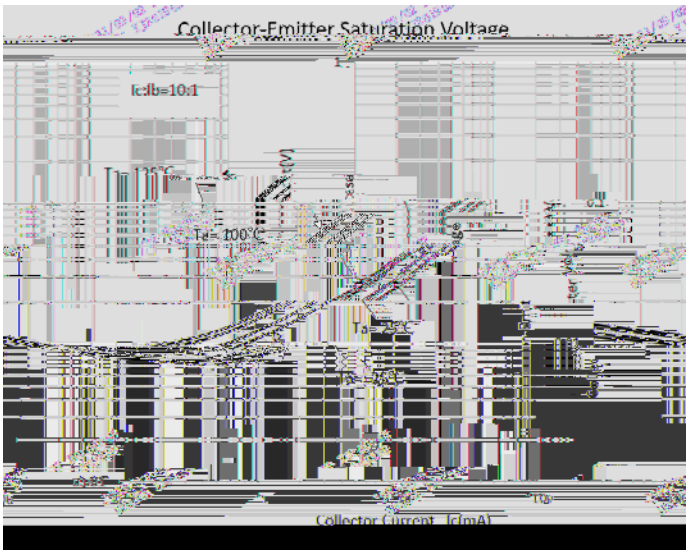
■ Electrical Characteristics (Ta=25 unless otherwise noted)

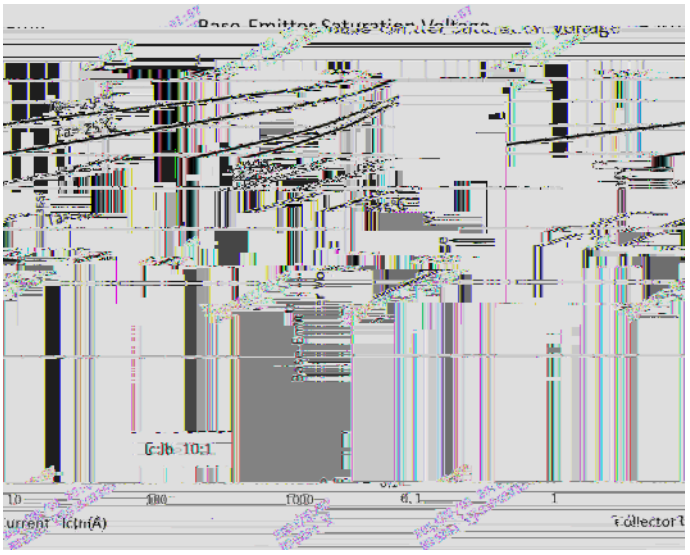
Item	Symbol	Unit	Conditions	Min	Typ	Max
Collector-base breakdown voltage	V_{CBO}	V	IC=10uA,IE=0	40		
Collector-emitter breakdown voltage	V_{CEO*}	V	IC=1mA,IB=0	40		
Emitter-base breakdown voltage	V_{EBO}	V	IE=10μA,IC=0	5		
Collector-emitter cut-off current	I_{CEO}	nA	VCE=30V, IB =0			100
Collector-base cut-off current	I_{CBO}	nA	VCB=30V, IE =0			100
Emitter-base cut-off current	I_{EBO}	nA	VEB=5 V, IC =0			100
DC current gain	h_{FE}		VCE= 5V,IC= 1mA	300		
	h_{FE}		VCE= 5V,IC= 500mA	300		900
	h_{FE}		VCE= 5V,IC= 1A	200		
Collector-emitter saturation voltage	$V_{CE(sat)}$	V	IC=100mA,IB=1mA			0.2
	$V_{CE(sat)}$	V	IC=500mA,IB=50mA			0.3
	$V_{CE(sat)}$	V	IC=1A,IB=100mA			0.5
Base-emitter saturation voltage	$V_{BE(sat)}$	V	IC=1A,IB=100mA			1.2
Base-emitter voltage	V_{BE}	V	VCE= 5V,IC= 1A			1.1
Collector-base output capacitance	Cob	pF	VCB=10V,f=1MHz			10
Transition frequency	f_T	MHz	VCE=10V,IC=50mA,f=100MHz	150		

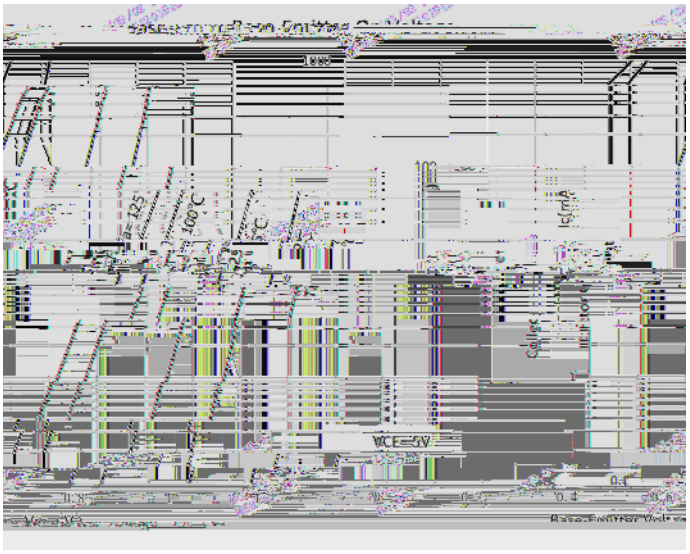
■ Characteristics (Typical)

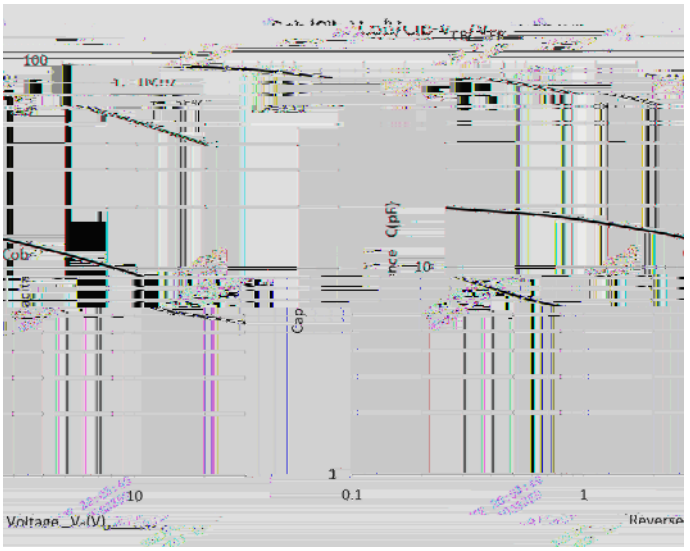


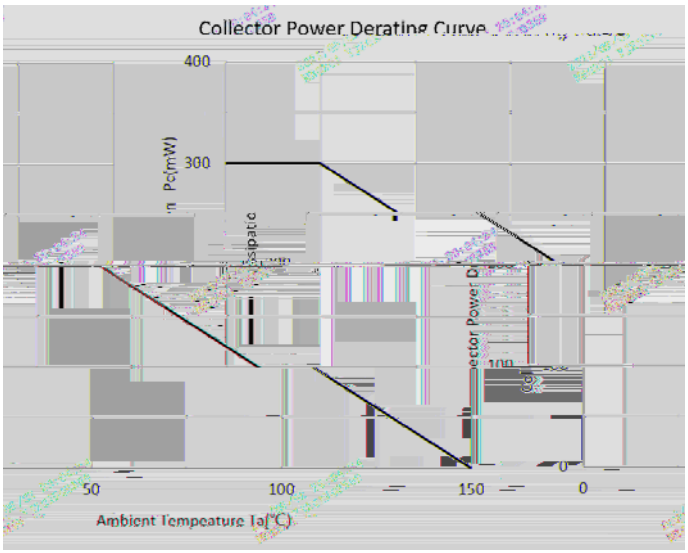



Collector-Emitter Saturation Voltage
Ic/Ib=10:1
Ta= 100°C
Collector Current Ic(mA)


G:Ib 10:1


VCE=5V


Cap
Voltage_V-(V)


Collector Power Derating Curve
400
300
Ambient Tempeature Ta(°C)
50
100
150

v627 3DFNDJH 2XWOLQH 'LPHQVLRQV

v627 6ROGHULQJ)RRWSULQW