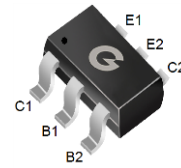
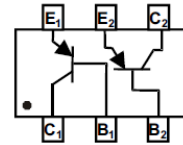


Features

- Epitaxial Planar Die Construction.
- Complementary NPN Type Available (DMMT5551-6L).

HF



SOT-23-6L

Mechanical Data

- Case: SOT-23-6L
- Molding compound, UL flammability classification rating 94V-0.
- Terminals: Matte tin plated leads, solderable per MIL-STD-202, Method 208.

Ordering Information

Part Number	Package	Shipping	Marking Code
DMMT5401-6L	SOT-23-6L	3000 pcs / Tape & Reel	K4S

Maximum Ratings (@T_A=25°C unless otherwise specified For Tr1 and Tr2 in common)

Symbol	Parameter	Value	Units
MAXIMUM RATINGS			
V _{CB0}	Collector-Base Voltage	-160	V
V _{CEO}	Collector-Emitter Voltage	-150	V
V _{EBO}	Emitter-Base Voltage	-5	V
I _C (Note 1)	Collector Current - Continuous	-0.2	A
Thermal Characteristic			
P _D (Note 1,2)	Power Dissipation Ta=25°C	300	mW
R _{θJA} (Note 1)	Thermal Resistance, Junction to Ambient	417	°C/W
T _J	Junction Temperature	-55~150	°C
T _{STG}	Junction and Storage Temperature	-55 to +150	°C

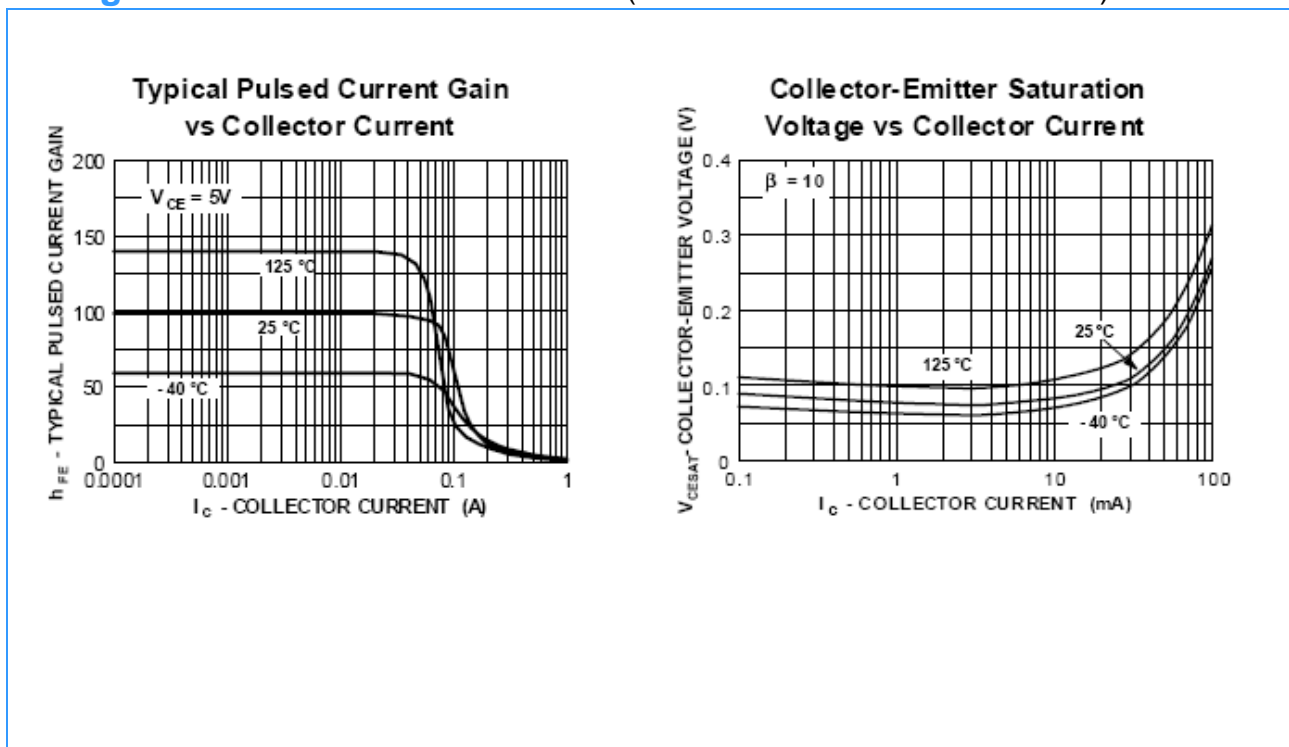
Notes:1、 Device mounted on FR-4 PCB, 1 inch x 0.85 inch x 0.062 inch.

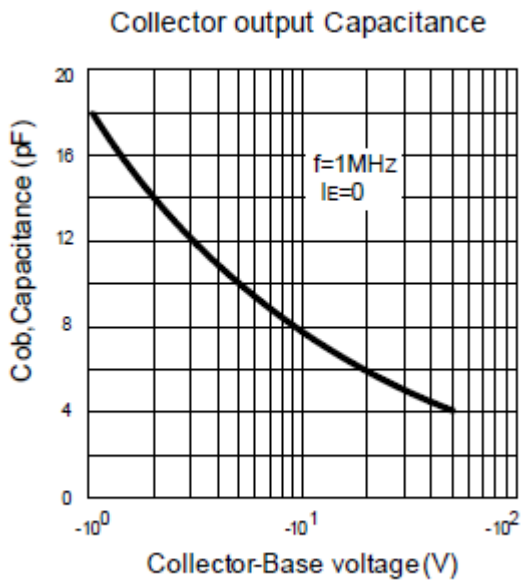
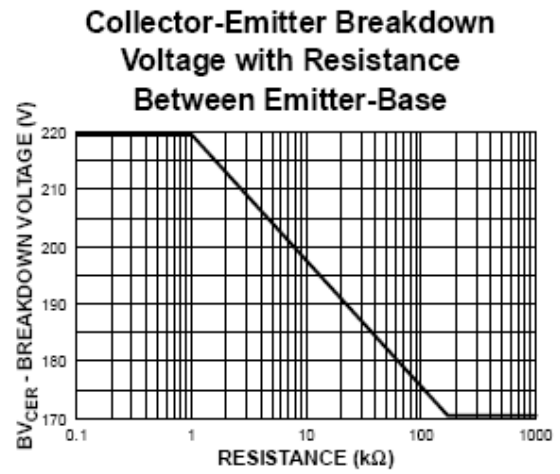
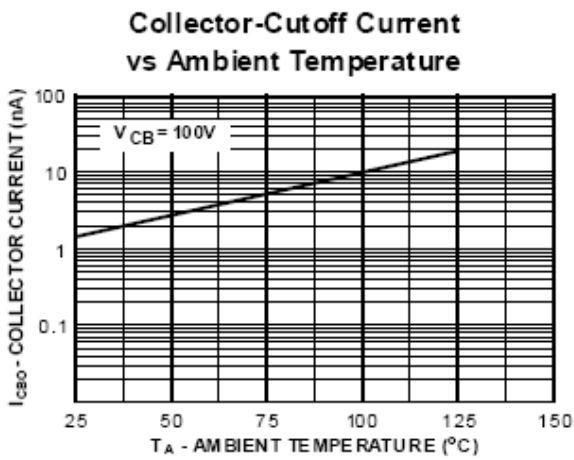
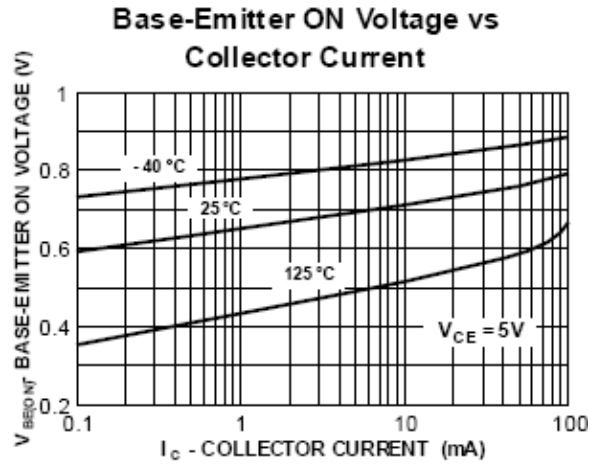
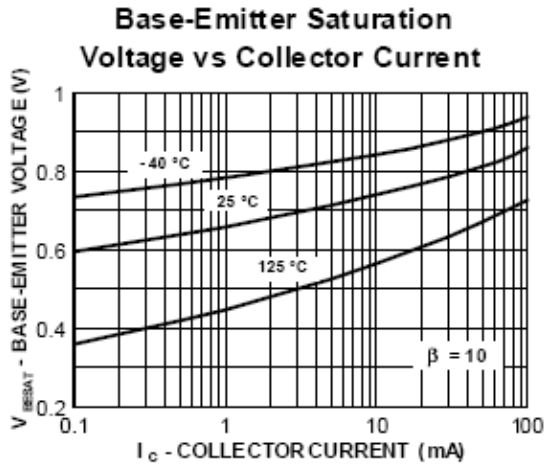
- 2、 Maximum combined dissipation.
- 3、 Short duration test pulse used to minimize self-heating effect.
- 4、 The DC Current Gain, h_{FE}, (matched at I_C = -10mA and V_{CE} = -5V) Collector Emitter Saturation Voltage, V_{CE(SAT)}, and Base Emitter Saturation Voltage, V_{BE(SAT)} are matched with typical matched tolerances of 1% and maximum of 2%.

Electrical Characteristics (@ $T_A=25^\circ\text{C}$ unless otherwise specified For Tr1 and Tr2 in common)

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
OFF CHARACTERISTICS (Note 3)						
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C=-100\mu\text{A}, I_E=0$	-160	-	-	V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C=-1\text{mA}, I_B=0$	-150	-	-	V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E=-10\mu\text{A}, I_C=0$	-5	-	-	V
Collector cut-off current	I_{CBO}	$V_{CB}=-120\text{V}, I_E=0$ $V_{CB}=-120\text{V}, I_E=0, T_A=100^\circ\text{C}$	-	-	-50	nA uA
Emitter cut-off current	I_{EBO}	$V_{EB}=-3\text{V}, I_C=0$	-	-	-50	nA
ON CHARACTERISTICS (Note 3)						
DC Current Gain (Note 4)	h_{FE}	$I_C = -1.0\text{mA}, V_{CE} = -5.0\text{V}$	50	-	-	-
		$I_C = -10\text{mA}, V_{CE} = -5.0\text{V}$	60	-	240	-
		$I_C = -50\text{mA}, V_{CE} = -5.0\text{V}$	50	-	-	-
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=-10\text{mA}, I_B=-1\text{mA}$ $I_C=-50\text{mA}, I_B=-5\text{mA}$	-	-	-0.2 -0.5	V
Base-Emitter Saturation Voltage	$V_{BE(SAT)}$	$I_C = -10\text{mA}, I_B = -1.0\text{mA}$ $I_C = -50\text{mA}, I_B = -5.0\text{mA}$	-	-	-1	V
SMALL SIGNAL CHARACTERISTICS						
Transition frequency	f_t	$V_{CE}=-10\text{V}, I_C=-10\text{mA}$ $f=100\text{MHz}$	100	-	300	MHz
Collector output capacitance	C_{obo}	$V_{CB}=-10\text{V}, f=1\text{MHz}$	-	-	6	pF
Small Signal Current Gain	h_{fe}	$I_C=-1.0\text{mA}, V_{CE}=-10\text{V}, f=1.0\text{kHz}$	40	-	200	-
Noise Figure	NF	$V_{CE} = -5.0\text{V}, I_C = -200\mu\text{A}, R_S = 10\Omega, f = 1.0\text{kHz}$	-	-	8	dB

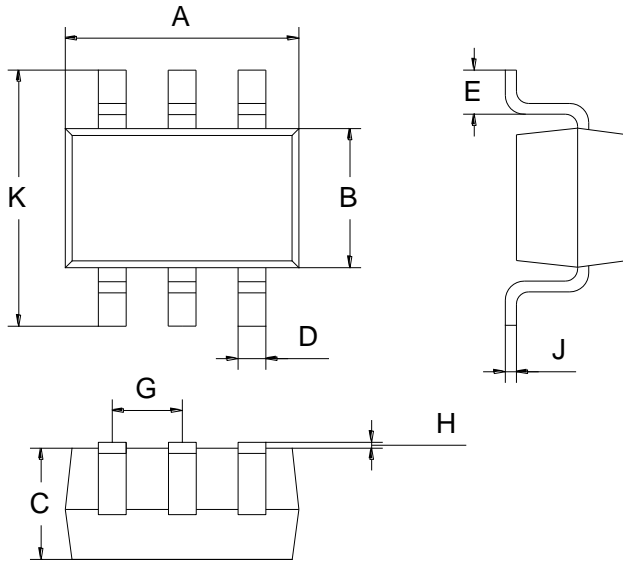
Ratings and Characteristic Curves ($T_A=25^\circ\text{C}$ unless otherwise noted)





Package Outline Dimensions (unit:mm)

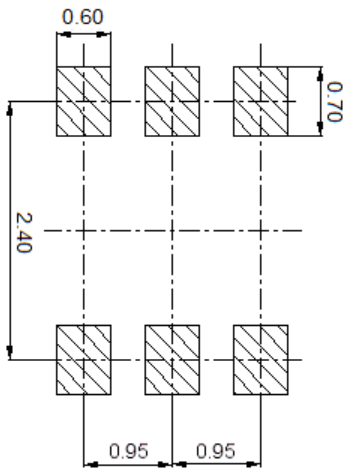
SOT-23-6L



SOT-23-6L		
Dim	Min	Max
A	2.80	3.00
B	1.50	1.70
C	1.00	1.20
D	0.35	0.45
E	0.35	0.55
G	0.90	1.00
H	0.02	0.10
J	0.10	0.20
K	2.60	3.00

SOLDERING FOOTPRINT (unit:mm)

SOT-23-6L



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