GOOD-ARK
SEMICONDUCTOR

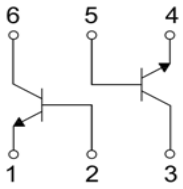
MMDT3904
Dual NPN Transistor

Features

- Epoxy meets UL 94 V-0 flammability rating
- Lead free finish/RoHS compliant
- For switching and AF amplifier applications
- Rugged and reliable



SOT-363



Schematic Diagram

Absolute Maximum Ratings (T_A=25°C unless otherwise noted)

Parameter	Symbol	Value	Unit
		200	m
		200	m
R J A			℃/W
			℃
			℃

Electrical Characteristics (T_A=25°C unless otherwise noted)

Parameter	Symbol	Test Conditions	Min	Max	Unit
	$h_{FE(1)}$				
	$h_{FE(2)}$				
	$h_{FE(3)}$				
	$h_{FE(4)}$				
	$h_{FE(5)}$				
	$V_{CE(sat)1}$				
	$V_{CE(sat)2}$				
	$V_{BE(sat)1}$				
	$V_{BE(sat)2}$				
		C			
		,			
		,			

Typical Characteristic Curves

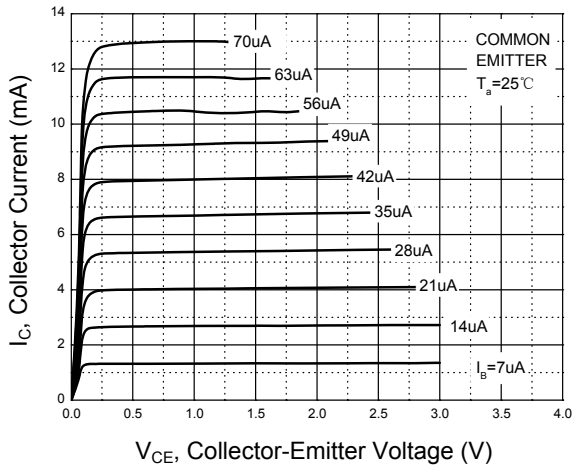


Figure 1. Static Characteristic

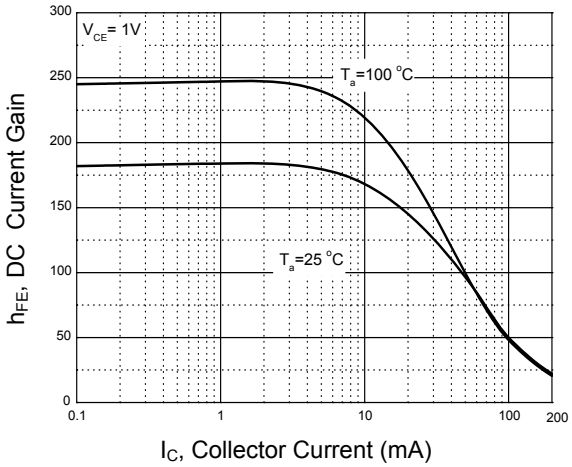


Figure 2. h_{FE} — I_C

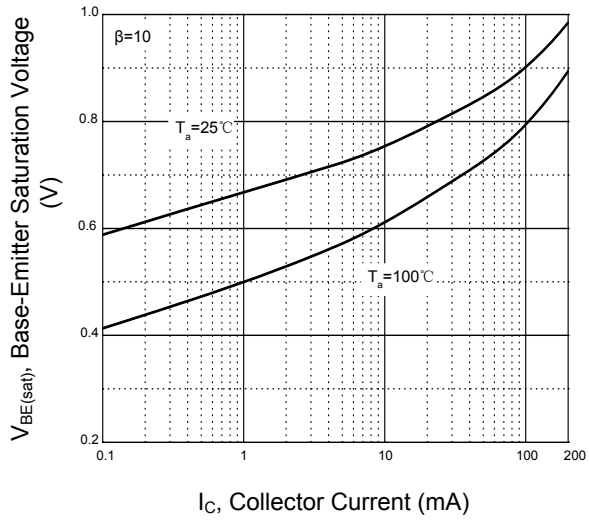


Figure 3. $V_{BE(sat)}$ — I_C

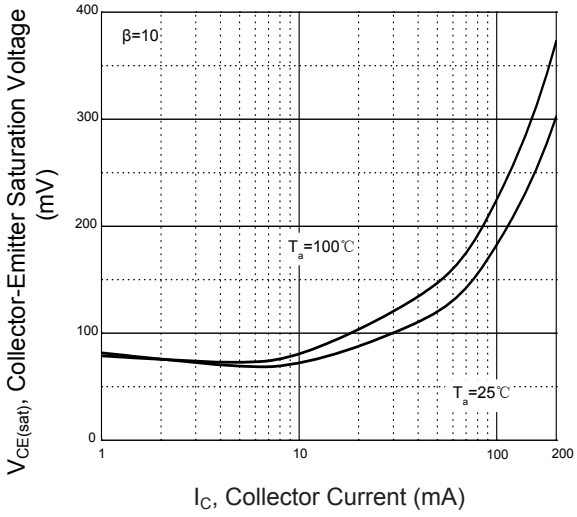


Figure 4. $V_{CE(sat)}$ — I_C

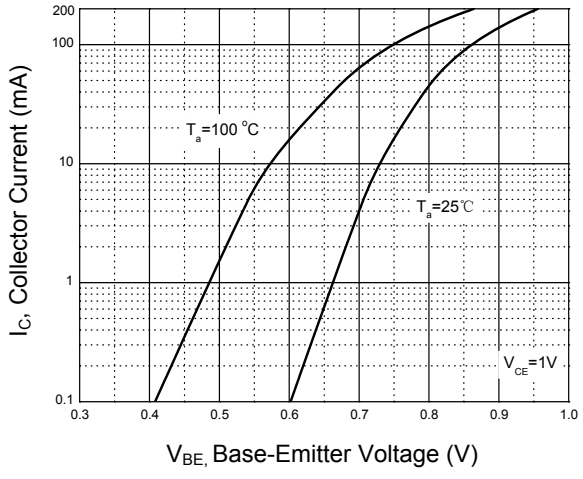


Figure 5. I_C — V_{BE}

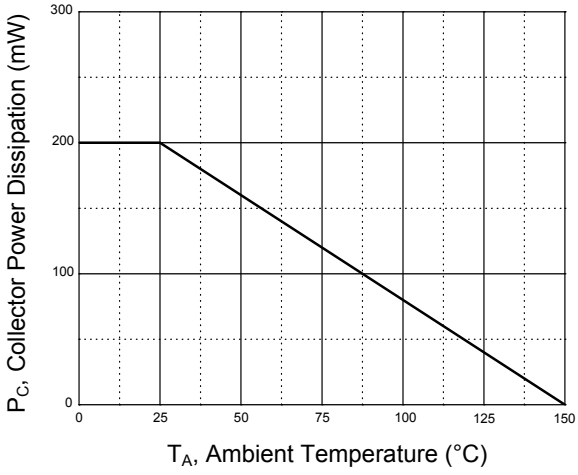
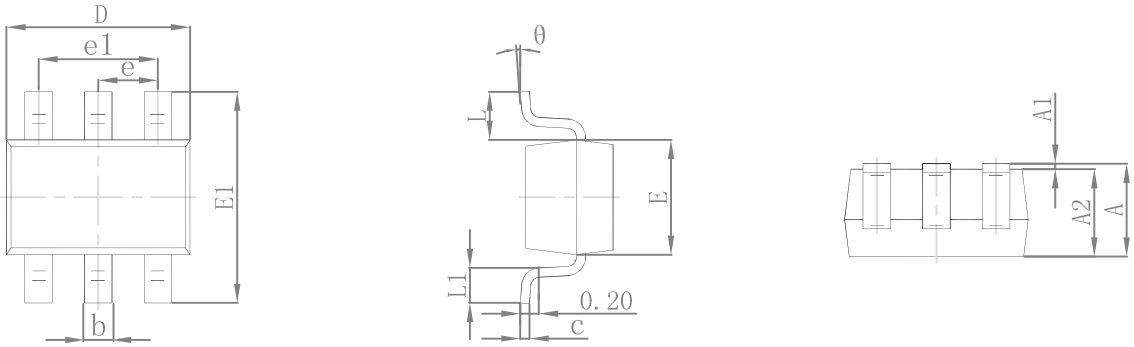


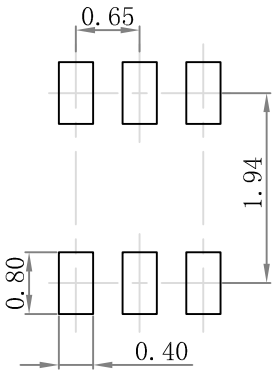
Figure 6. P_C — T_A

Package Outline Dimensions (SOT-363)



A	0.900	1.100	0.035	0.043
A1	0.000	0.100	0.000	0.004
A2	0.900	1.000	0.035	0.039
b	0.150	0.350	0.006	0.014
c	0.100	0.150	0.004	0.006
D	2.000	2.200	0.079	0.087
E	1.150	1.350	0.045	0.053
E1	2.150	2.400	0.085	0.094
e	0.650 TYP		0.026 TYP	
e1	1.200	1.400	0.047	0.055
L	0.525 REF		0.021 REF	
L1	0.260	0.460	0.010	0.018
θ	0°	8°	0°	8°

Recommended Pad Layout



Note:
1. Controlling dimension: in millimeters
2. General tolerance: ±0.05mm
3. The pad layout is for reference purposes only

Ordering Information

Device	Package	Marking	Quantity	HSF Status
MMDT3904	SOT-363	K6N	3000pcs / Reel	RoHS Compliant