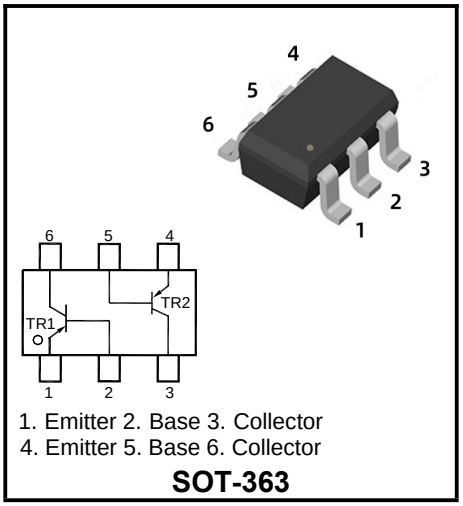
PNP Plastic-Encapsulate Transistors

DUAL TRANSISTOR



1. Emitter 2. Base 3. Collector
4. Emitter 5. Base 6. Collector

SOT-363

Features

- Epitaxial Planar Die Construction
- Ideal for Low Power Amplification and Switching

Marking Code	
MMDT4403DW	K2T

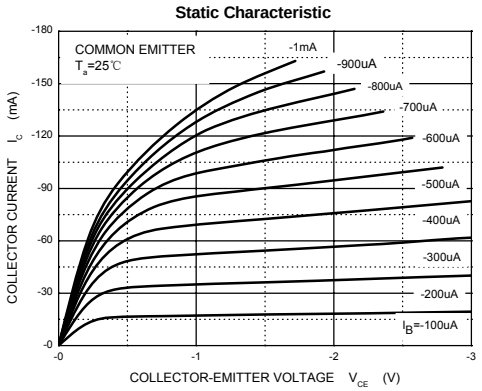
Maximum Ratings (Ta=25℃ unless otherwise specified.)

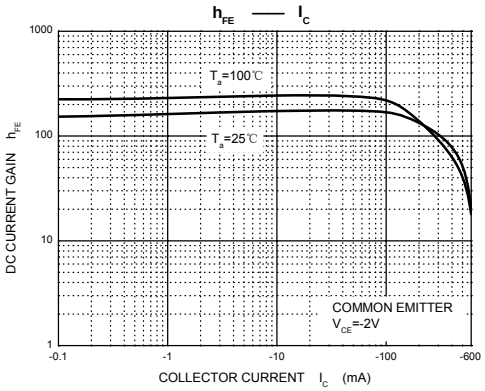
Symbol	Parameter	Value	Units
V_{CBO}	Collector-Base Voltage	-40	V
V_{CEO}	Collector-Emitter Voltage	-40	V
V_{EBO}	Emitter-Base Voltage	-5	V
I_C	Collector Current -Continuous	-0.6	A
P_C	Collector Power Dissipation	0.2	W
$R_{\theta JA}$	Thermal Resistance from Junction to Ambient	625	℃/W
T_J	Junction Temperature	150	℃
T_{stg}	Storage Temperature	-55 to +150	℃

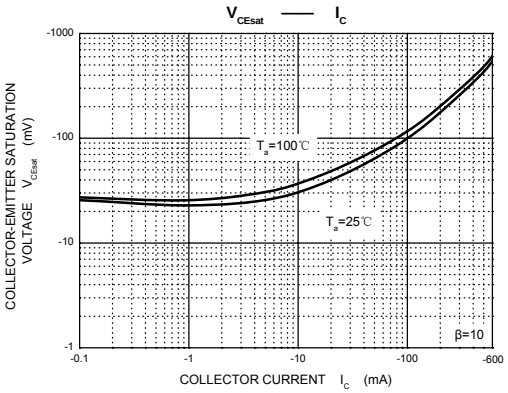
Electrical Characteristics (Ta=25℃ unless otherwise specified.)

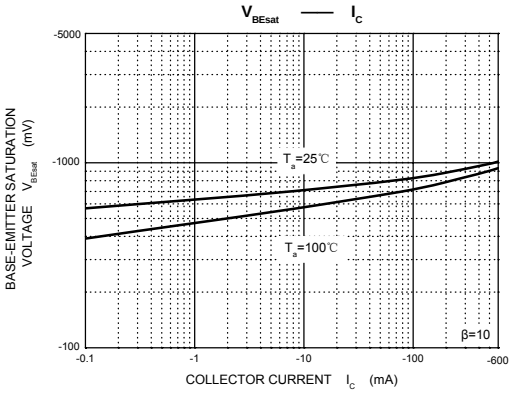
Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	I_C=-100μA , I_E=0	-40			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	I_C= -1mA , I_B=0	-40			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	I_E=-100μA, I_C=0	-5			V
Collector cut-off current	I_{CBO}	V_{CB}=-50V, I_E=0			-0.1	μA
Collector cut-off current	I_{CEO}	V_{CE}=-35V, I_B=0			-0.5	μA
Emitter cut-off current	I_{EBO}	V_{EB}=-5V, I_C=0			-0.1	μA
DC current gain	$h_{FE(1)}$	V_{CE}=-1V, I_C= -0.1mA	30			
	$h_{FE(2)}$	V_{CE}=-1V, I_C= -1mA	60			
	$h_{FE(3)}$	V_{CE}=-1 V, I_C= -10mA	100			
	$h_{FE(4)}$	V_{CE}=-2 V, I_C= -150mA	100		300	
	$h_{FE(5)}$	V_{CE}=-2 V, I_C= -500mA	20			
Collector-emitter saturation voltage	$V_{CE(sat)1}$	I_C=-150 mA, I_B=-15mA			-0.4	V
	$V_{CE(sat)2}$	I_C=-500 mA, I_B=-50mA			-0.75	V
Base-emitter saturation voltage	$V_{BE(sat)1}$	I_C= -150 mA, I_B=-15mA	-0.75		-0.95	V
	$V_{BE(sat)2}$	I_C= -500 mA, I_B=-50mA			-1.3	V
Transition frequency	f_T	V_{CE}= -10V, I_C=-20mA,f = 100MHz	200			MHz
Output capacitance	C_{ob}	V_{CB}=-10V, I_E=0,f=1MHz			8.5	pF
Delay time	t_d	V_{CC}=-30V, V_{BE}=-2V,I_C=-150mA , I_{B1}=-15mA			15	nS
Rise time	t_r				20	nS
Storage time	t_S	V_{CC}=-30V, I_C=-150mA I_{B1}=- I_{B2}= -15mA			225	nS
Fall time	t_f				30	nS

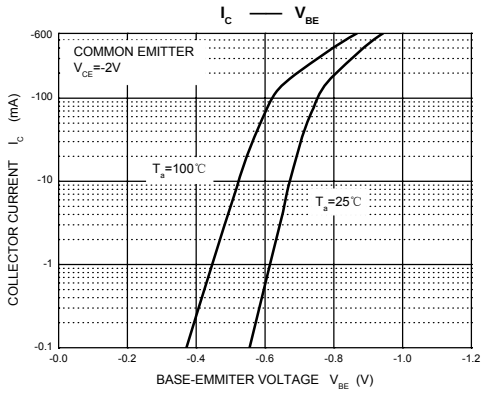
Typical Characteristics

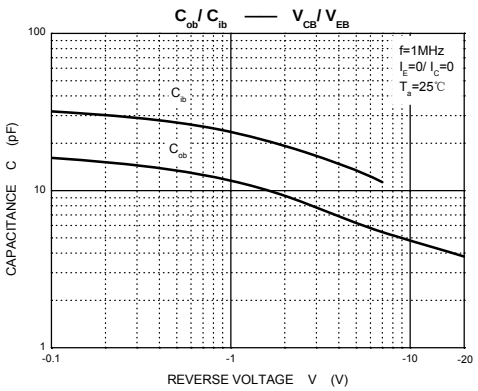


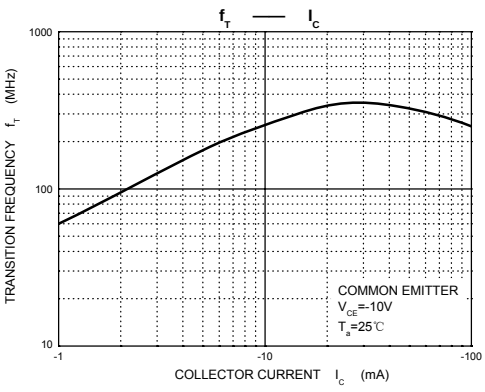


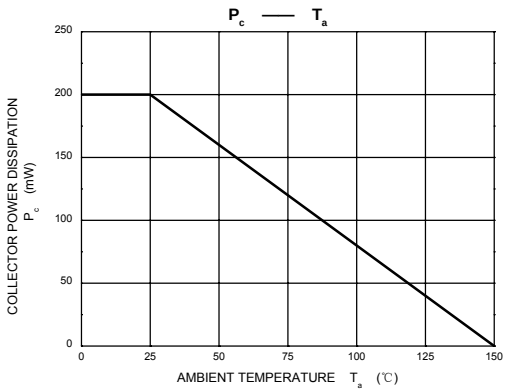










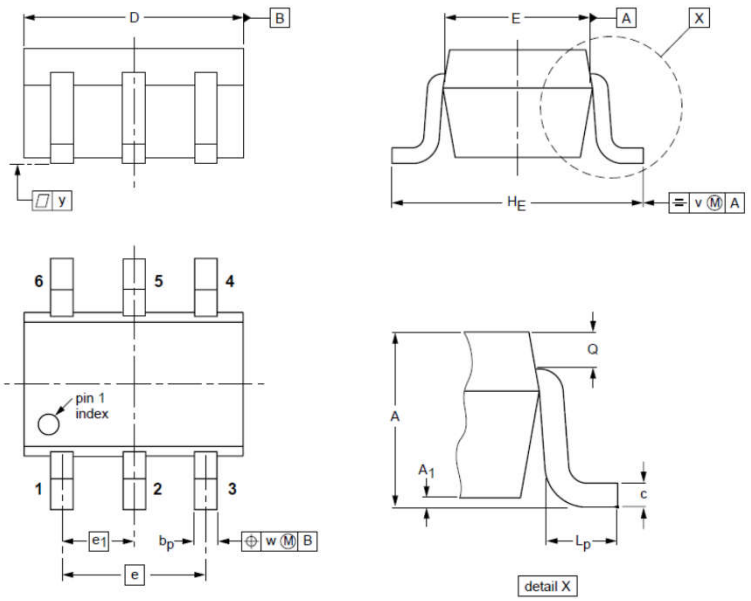


Ordering information

Package	Packing Description	Packing Quantity
SOT-363	Tape/Reel,7"reel	3000PCS/Reel 120000PCS/Carton

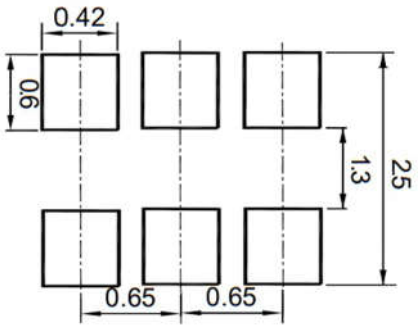
Package Dimensions

SOT-363



Dim.	Millimeter(mm)		mil	
	Min.	Max.	Min.	Max.
A	0.8	1.1	32	43
A1	-	0.1	-	3.94
bp	0.20	0.30	7.87	11.81
c	0.10	0.25	3.94	9.84
D	1.8	2.2	70.87	86.61
E	1.15	1.35	45.28	53.15
e	1.3		51.18	
e1	0.65		25.6	
HE	2.0	2.2	78.74	86.6
Lp	0.15	0.45	5.90	17.71
Q	0.15	0.25	5.90	9.84
v	0.2		7.78	
w	0.2		7.78	
y	0.1		3.94	

The recommended mounting pad size



Disclaimer

The information presented in this document is for reference only. GuangDong Youfeng Microelectronics Co.,Ltd. reserves the right to make changes without notice for the specification of the products displayed herein to improve reliability, function or design or otherwise. The product listed herein is designed to be used with ordinary electronic equipment or devices, and not designed to be used with equipment or devices which require high level of reliability and the malfunction of with would directly endanger human life (such as medical instruments, transportation equipment, aerospace machinery, nuclear-reactor controllers, fuel controllers and other safety devices),YFW or anyone on its behalf, assumes no responsibility or liability for any damages resulting from such improper use of sale. This publication supersedes & replaces all information previously supplied. For additional information, please visit our website https://www.yfwdiode.com, or consult YFW sales office for further assistance.