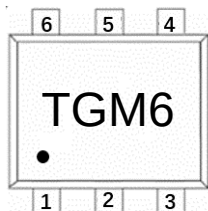


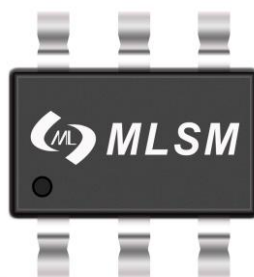
Features

- Complementary to MMDT9014

MARKING: TGM6



Marking and pin assignment



SOT-363 top view



Schematic diagram



Halogen-Free

Maximum Ratings ($T_a=25^{\circ}\text{C}$ unless otherwise noted)

Symbol	Parameter	Value	Unit
V_{CBO}	Collector-Base Voltage	-50	V
V_{CEO}	Collector-Emitter Voltage	-45	V
V_{EBO}	Emitter-Base Voltage	-5	V
I_C	Collector Current	-100	mA
P_C	Collector Power Dissipation	200	mW
$R_{\theta JA}$	Thermal Resistance Junction to Ambient	625	$^{\circ}\text{C}/\text{W}$
T_J	Junction Temperature	150	$^{\circ}\text{C}$
T_{STG}	Storage Temperature	-55~+150	$^{\circ}\text{C}$

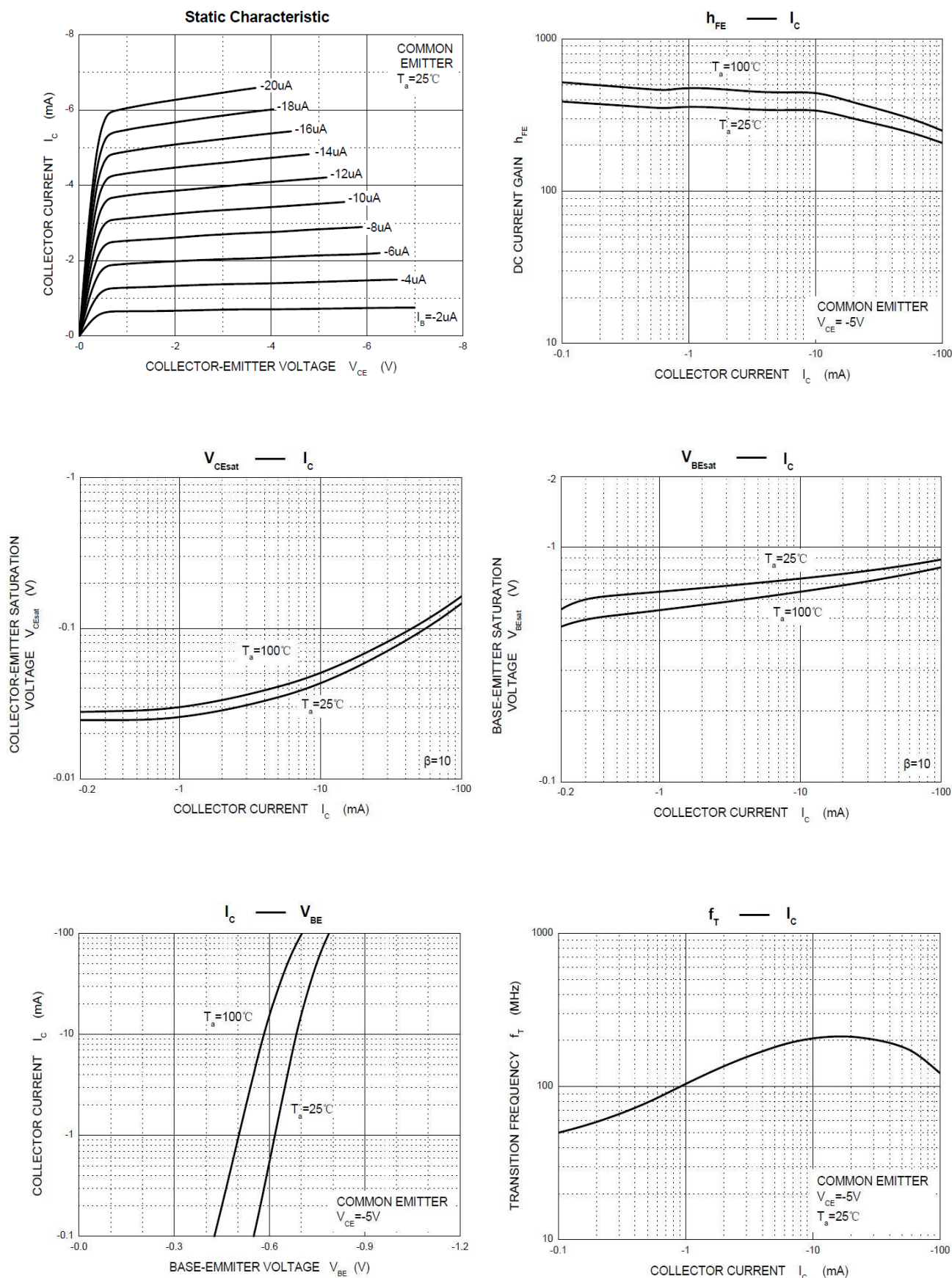
ELECTRICAL CHARACTERISTICS ($T_a=25^{\circ}\text{C}$ unless otherwise specified)

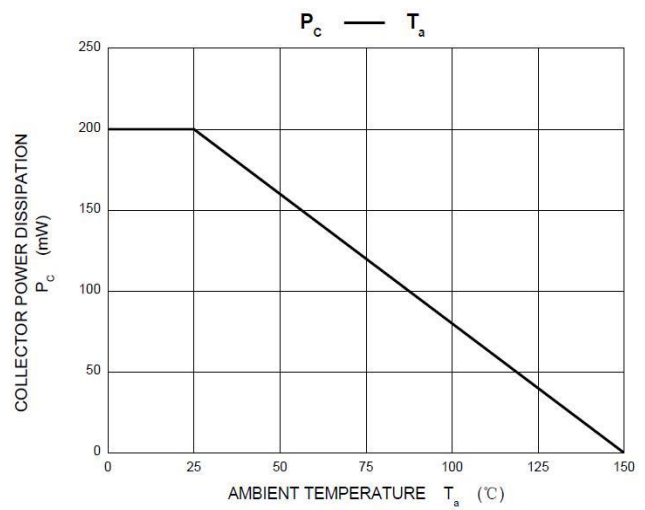
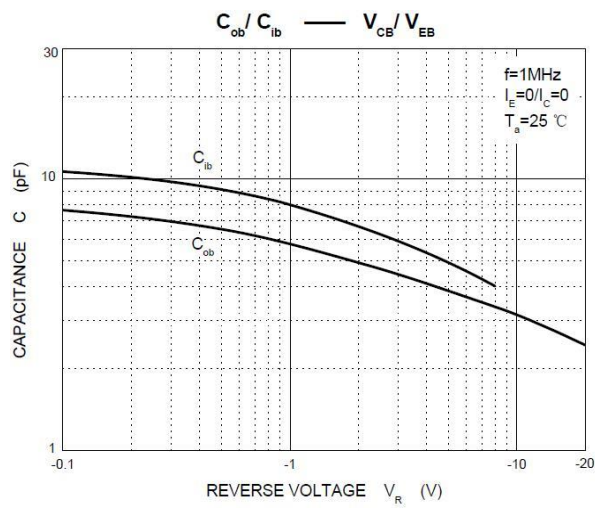
Symbol	Parameter	Condition	Min	Typ	Max	Unit
$V_{(BR)CBO}$	Collector-base breakdown voltage	$I_C = -100\mu\text{A}$, $I_E = 0$	-50	--	--	V
$V_{(BR)CEO}$	Collector-emitter breakdown voltage	$I_C = -0.1\text{mA}$, $I_B = 0$	-45	--	--	V
$V_{(BR)EBO}$	Emitter-base breakdown voltage	$I_E = -100\mu\text{A}$, $I_C = 0$	-5	--	--	V
I_{CBO}	Collector cut-off current	$V_{CB} = -50\text{V}$, $I_E = 0$	--	--	-0.1	μA
I_{EBO}	Emitter cut-off current	$V_{EB} = -50\text{V}$, $I_C = 0$	--	--	-0.1	μA
h_{FE}	DC current gain	$V_{CE} = -50\text{V}$, $I_C = -1\text{mA}$	300	--	400	
$V_{CE(sat)}$	Collector-emitter saturation voltage	$I_C = -100\text{mA}$, $I_B = -10\text{mA}$	--	--	-0.3	V
$V_{BE(sat)}$	Base-emitter saturation voltage	$I_C = -100\text{mA}$, $I_B = -10\text{mA}$	--	--	-1	V
V_{BE}	Base-emitter saturation voltage	$V_{CE} = -5\text{V}$, $I_B = -2\text{mA}$	-0.6	--	-0.75	V
f_T	Transition frequency	$V_{CE} = -5\text{V}$, $I_C = -10\text{mA}$ $f = 30\text{MHz}$	150	--	--	MHz

Ordering Information (Example)

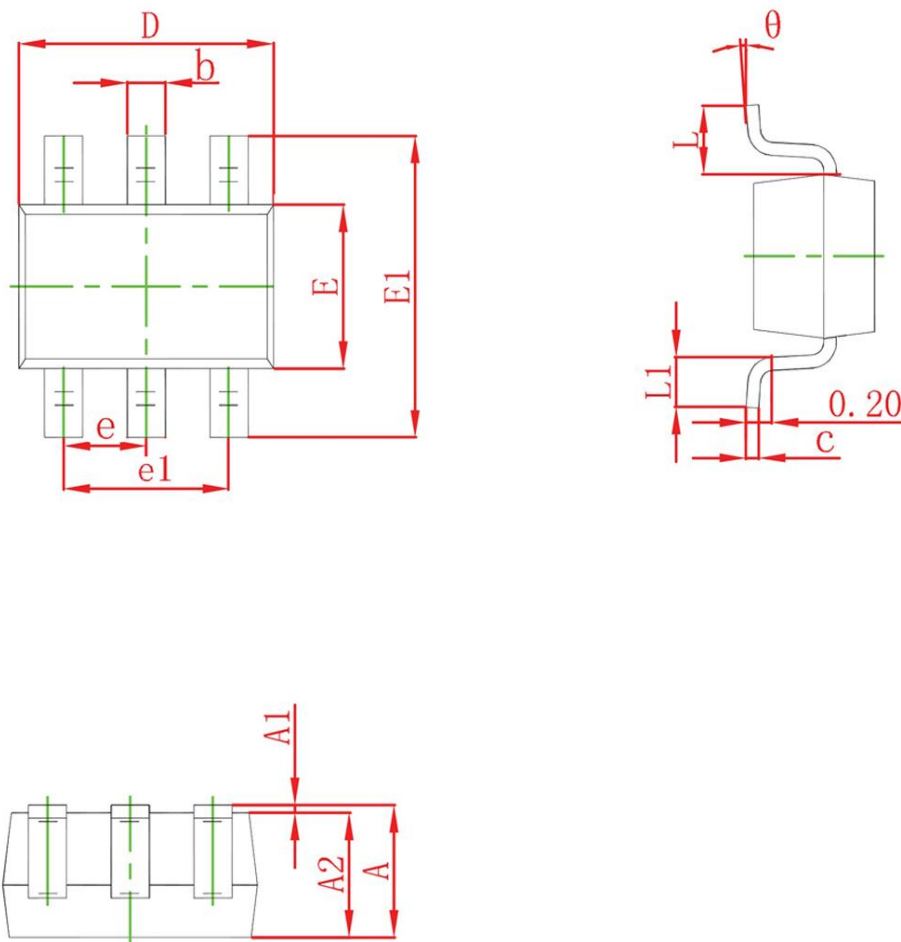
Type	Package	Marking	Minimum Package(pcs)	Inner Box Quantity(pcs)	Outer Carton Quantity(pcs)	Delivery Mode
MMDT9015	SOT-363	TGM6	3,000	45,000	180,000	7"reel

Typical Operating Characteristics





SOT-363 Package information



Symbol	Dimensions in Millimeters(mm)		Dimensions In Inches	
	Min	Max	Min	Max
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	0.650TYP		0.026TYP	
e1	1.200	1.400	0.047	0.055
L	0.525REF		0.021REF	
L1	0.260	0.460	0.010	0.018
θ	0°	8°	0°	8°