ELECTRICAL CHARACTERISTICS (T_A = 25°C unless otherwise specified)

INPUT

Parameter	Symbol	Test Condition	Min	Typ.*	Max	Unit
Forward Voltage	V_F	I_F = 10mA		1.2	1.5	V
Reverse Leakage	I_R	V_R = 6V		0.1	100	µA
Input Capacitance	C_{in}	V = 0V, f = 1MHz		25		pF

OUTPUT

Parameter	Symbol	Test Condition	Min	Typ.*	Max	Unit
Collector—Emitter breakdown Voltage	BV_{CEO}	I_C = 0.1mA, I_F = 0mA	80			V
Emitter—Collector breakdown Voltage	BV_{ECO}	I_E = 0.1mA, I_F = 0mA	7			V
Collector-Emitter Dark Current	I_{CEO}	V_{CE} = 10V, I_F = 0mA		5.0	50	nA

COUPLED

Parameter	Symbol	Test Condition	Min	Typ.*	Max	Unit
Current Transfer Ratio	CTR	I_F = 10mA, V_{CE} = 5V	100		200	%
		I_F = 1mA, V_{CE} = 5V	34	70		
Collector—Emitter Saturation Voltage	$V_{CE(sat)}$	I_F = 10mA, I_C = 2.5mA			0.4	V
Input to Output Isolation Resistance	R_{ISO}	V_{IO}= 500V Note 1		10^{11}		Ω
Turn-On Time	t_{on}	V_{CE} = 10V, Ic = 2mA, R_L = 100Ω		5.0		µs
Turn-Off Time	t_{off}			4.0		
Rise Time	t_r			1.6		
Fall Time	t_f			2.2		

Note 1 : Measured with input leads shorted together and output leads shorted together, R.H 40% to 60%.

* Typical values at T_A = 25°C

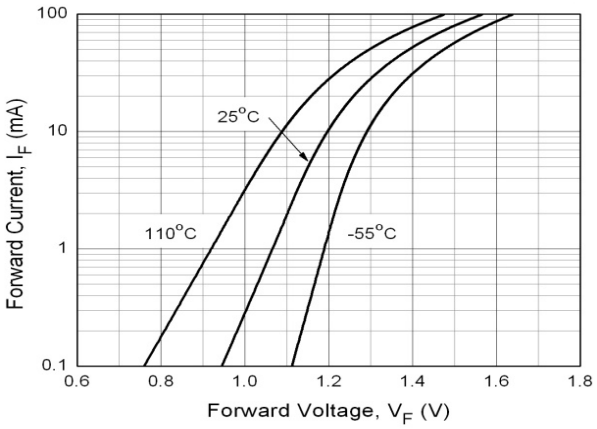


Fig 1 Forward Current vs Forward Voltage

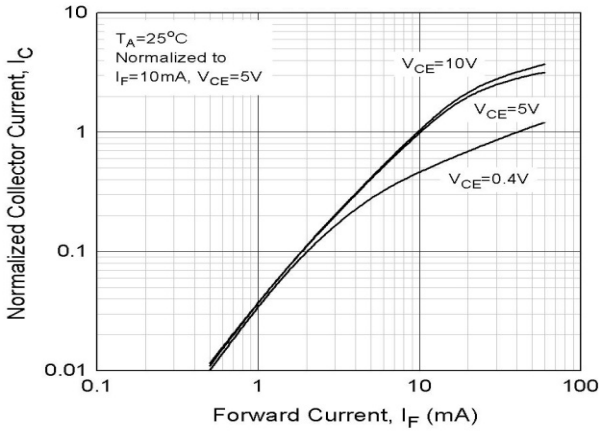


Fig 2 Normalized Collector Current vs Forward Current

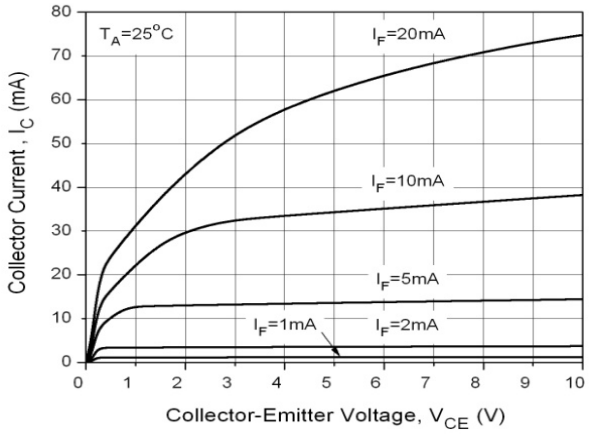


Fig 3 Collector Current vs Collector-emitter Voltage (1)

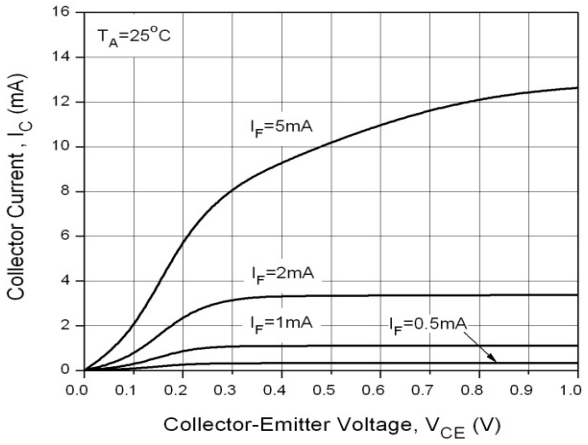


Fig 4 Collector Current vs Collector-emitter Voltage (2)

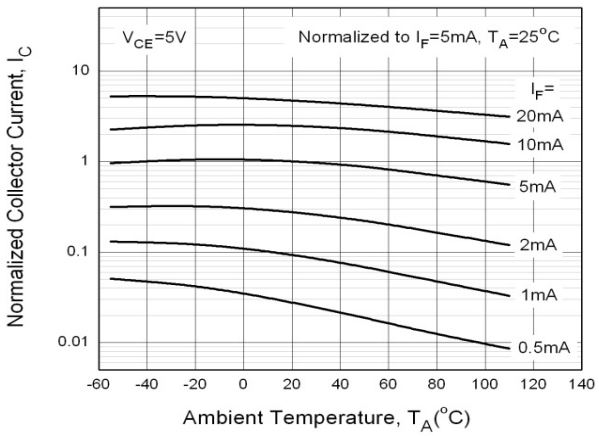


Fig 5 Normalized Collector Current vs T_A

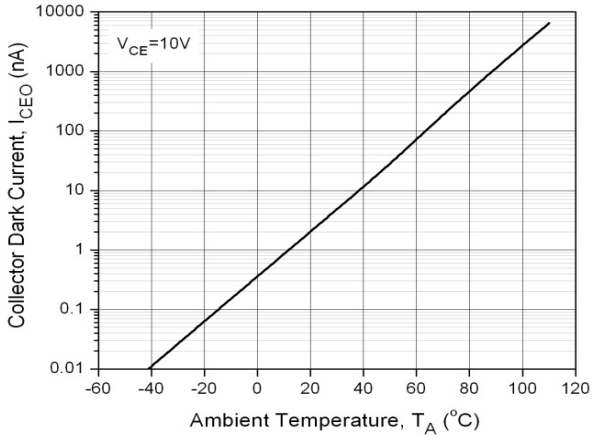


Fig 6 Collector Dark Current vs T_A

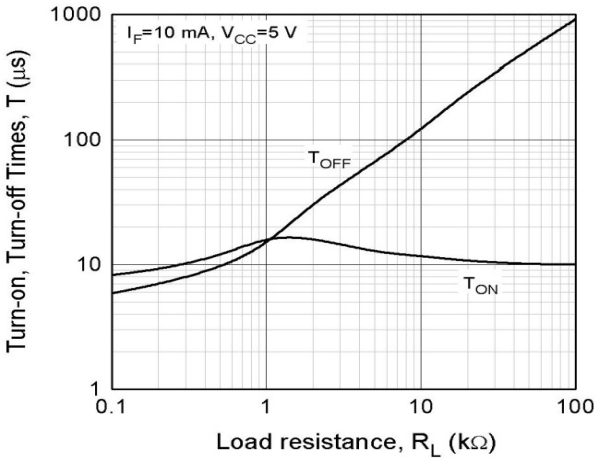
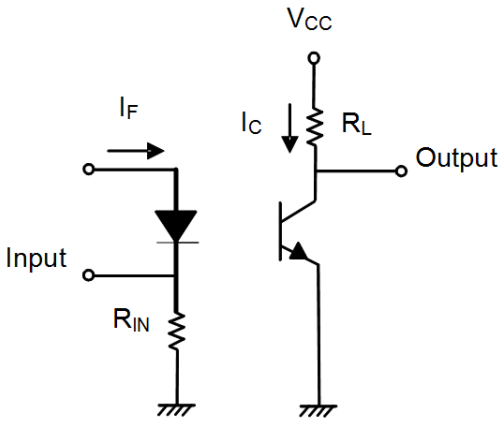


Fig 7 Turn-On and Turn-Off Time vs Load Resistance



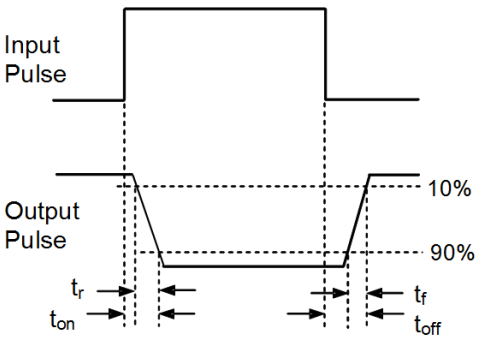


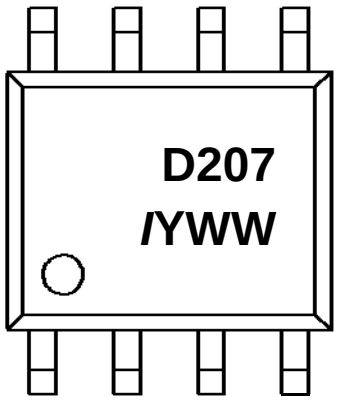
Fig 8 Switching Time Test Circuit

MOCD207

ORDER INFORMATION

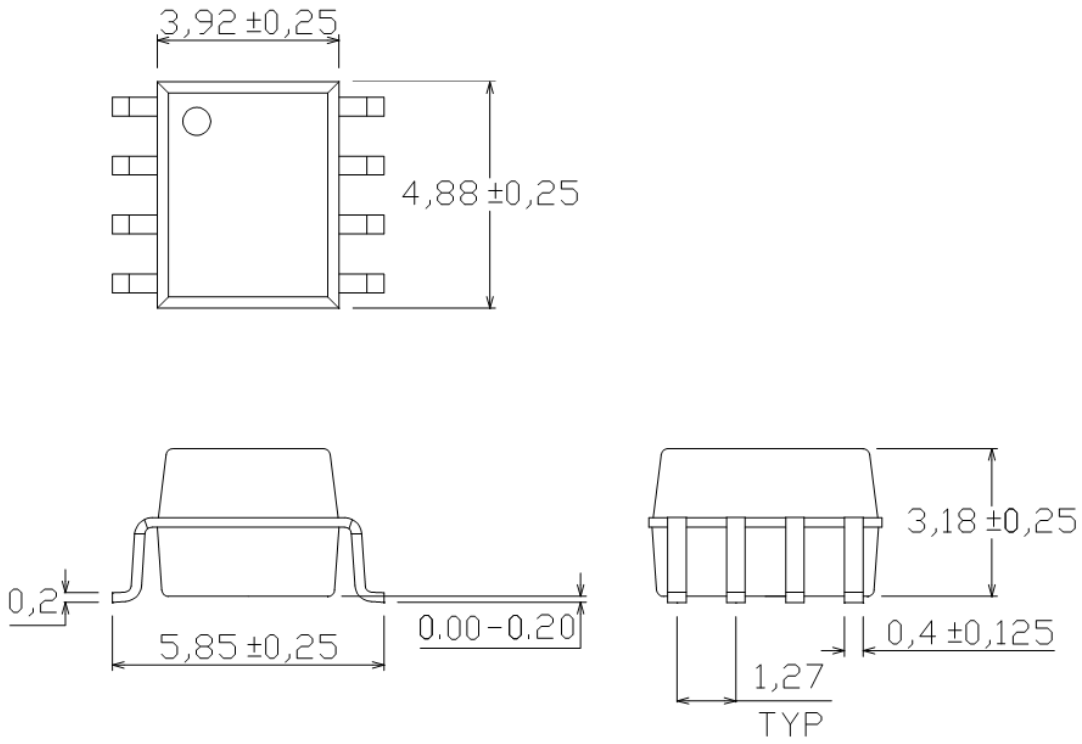
MOCD207			
After PN	**PN**	**Description**	**Packing quantity**
None	MOCD207	Surface Mount Tape & Reel	2000 pcs per reel

DEVICE MARKING

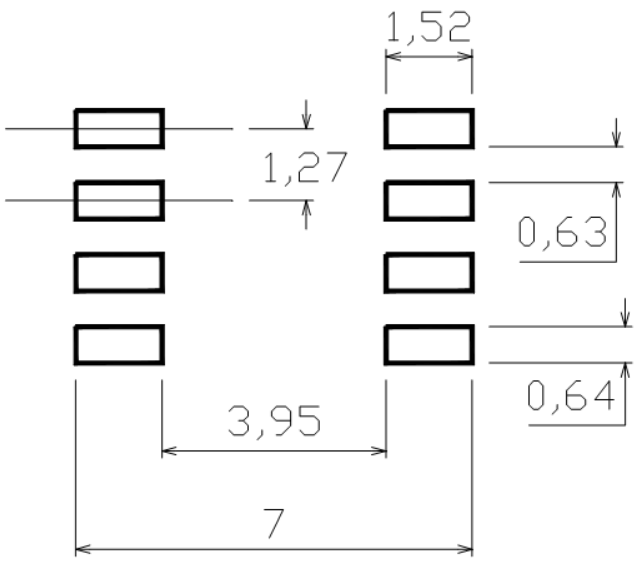


D207 denotes Device Part Number
/ denotes Isocom
Y denotes 1 digit Year code
WW denotes 2 digit Week code

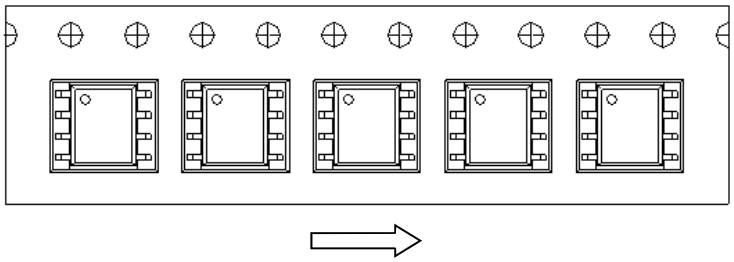
PACKAGE DIMENSIONS (mm)



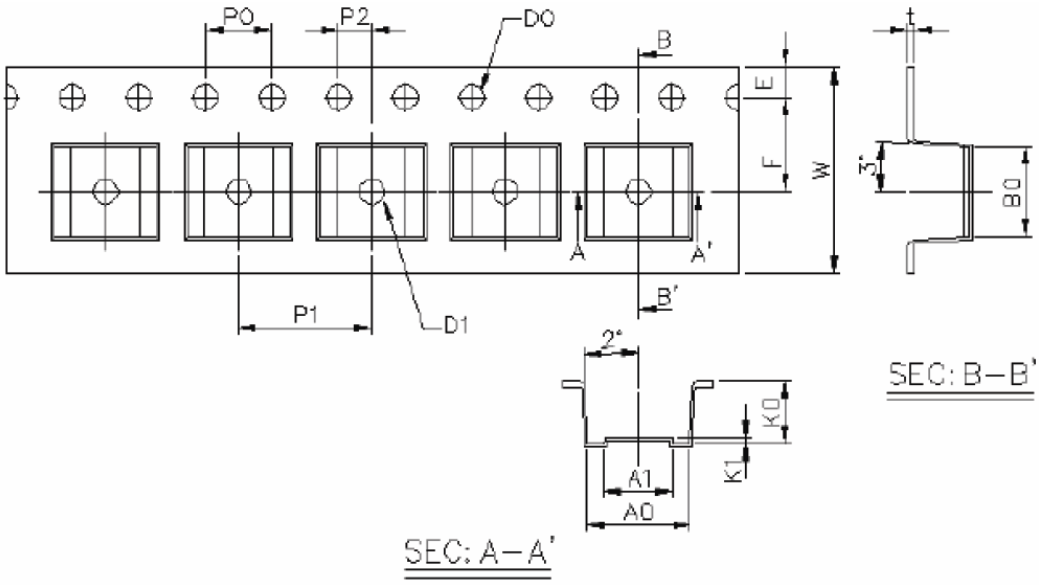
RECOMMENDED PAD LAYOUT (mm)



TAPE AND REEL PACKAGING

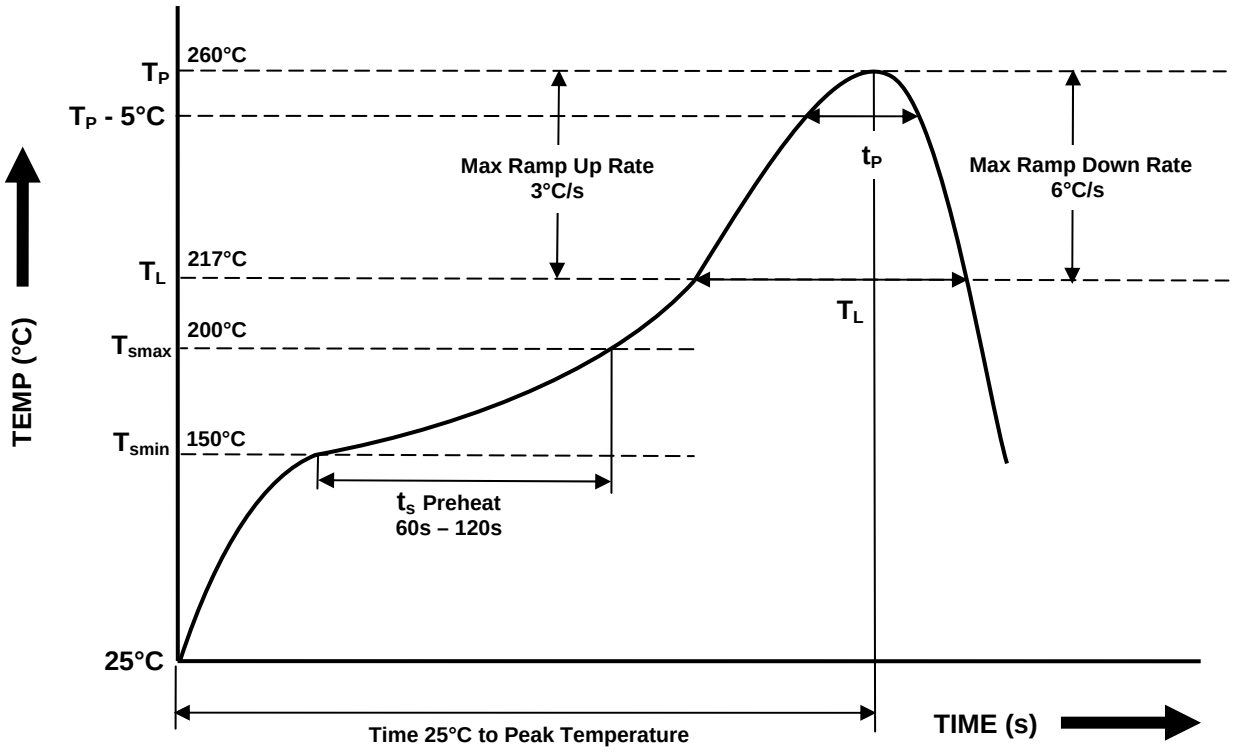


Direction of feed from reel



Dimension No.	A0	A1	B0	D0	D1	E	F
Dimension (mm)	6.2±0.1	4.1±0.1	5.28±0.1	1.5±0.1	1.5±0.3	1.75±0.1	5.5±0.1
Dimension No.	**Po**	**P1**	**P2**	**t**	**W**	**K0**	**K1**
Dimension (mm)	4.0±0.1	8.0±0.1	2.0±0.1	0.4±0.1	12.0 +0.3/-0.1	3.7±0.1	0.3±0.1

IR REFLOW SOLDERING TEMPERATURE PROFILE FOR SMD
(One Time Reflow Soldering is Recommended)



Profile Details	Conditions
Preheat - Min Temperature (T_{SMIN}) - Max Temperature (T_{SMAX}) - Time T_{SMIN} to T_{SMAX} (t_s)	 150°C 200°C 60s - 120s
Soldering Zone - Peak Temperature (T_P) - Liquidous Temperature (T_L) - Time within 5°C of Actual Peak Temperature (T_P – 5°C) - Time maintained above T_L (t_L) - Ramp Up Rate (T_L to T_P) - Ramp Down Rate (T_P to T_L)	 260°C 217°C 30s 60s 3°C/s max 6°C/s max
Average Ramp Up Rate (T_{smax} to T_P)	3°C/s max
Time 25°C to Peak Temperature	8 minutes max

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- When requiring a device for any ”specific” application, please contact our sales for advice.

- The contents described herein are subject to change without prior notice.

- Do not immerse device body in solder paste.

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COMPONENTS

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