

## Descriptions

This is 7805 is Voltage Regulator in a TO-220 Plastic Package.

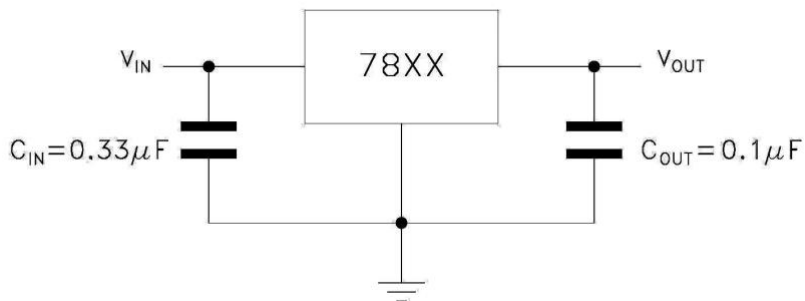
## Features

- 3-Terminal regulators
- Output current up to 1.5A
- Internal thermal overload protection and short-circuit limiting
- Halogen-free product

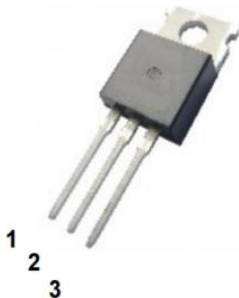
## Applications

- Voltage Regulator.

## Equivalent Circuit



## Pinning



PIN1: IN    PIN 2: GND    PIN 3: OUT

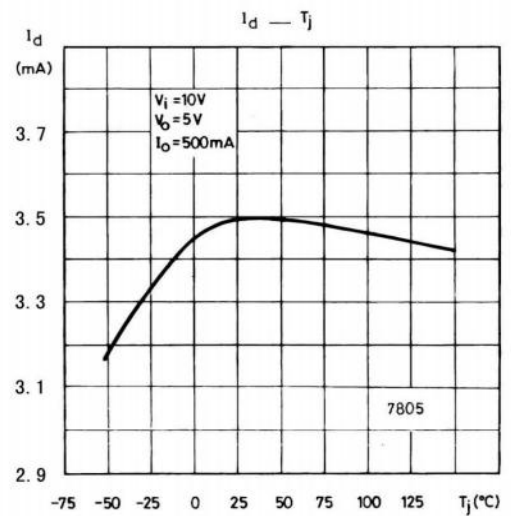
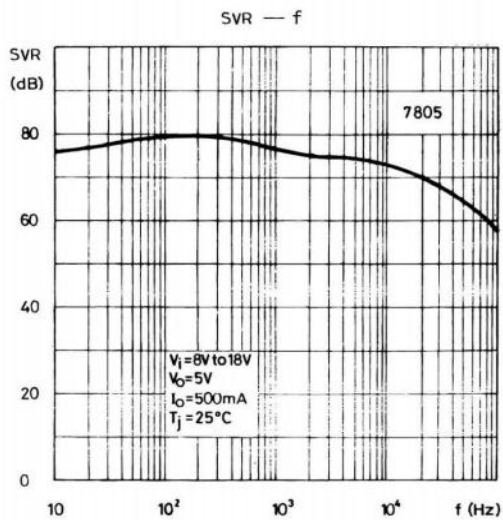
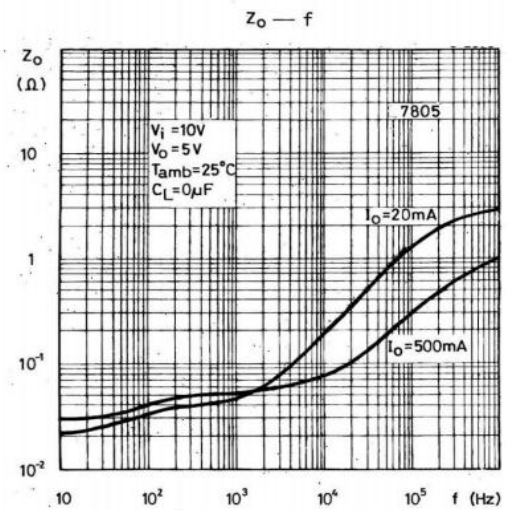
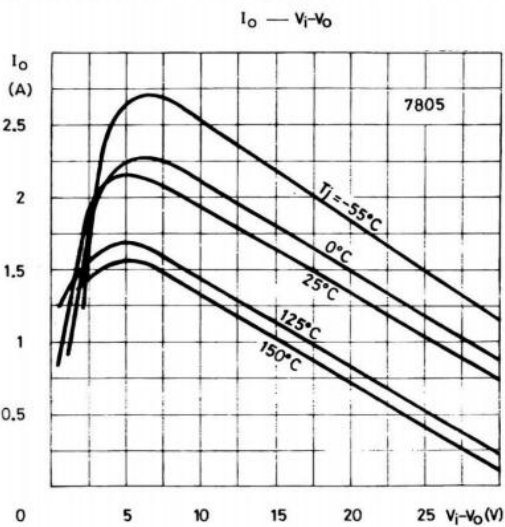
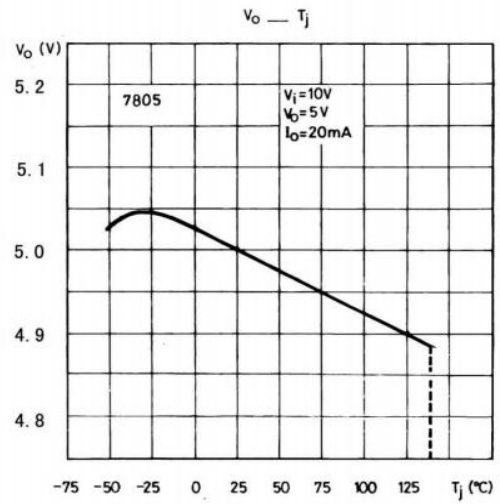
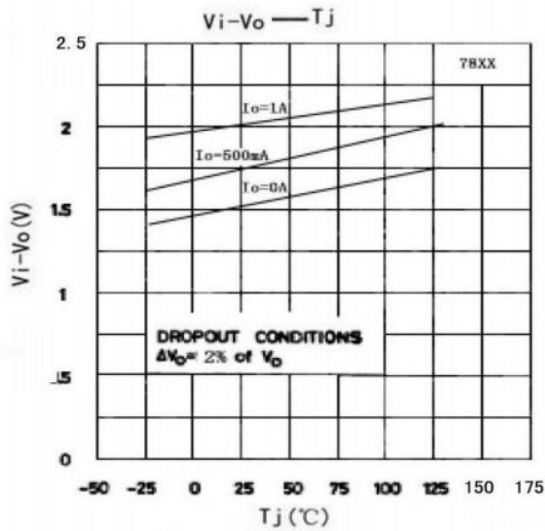
**Absolute Maximum Ratings(Ta=25°C)**

Parameter	Symbol	Rating	Unit
Input voltage	$V_I$	35	V
Thermal Resistance Junction-ambient	$R_{\theta JA}$	62.5	°C/W
Thermal Resistance Junction-case	$R_{\theta JC}$	5.0	°C/W
Junction Temperature	$T_J$	150	°C
Operating Junction Temperature Range	$T_{OPR}$	0~125	°C
Storage temperature range	$T_{stg}$	-65~150	°C

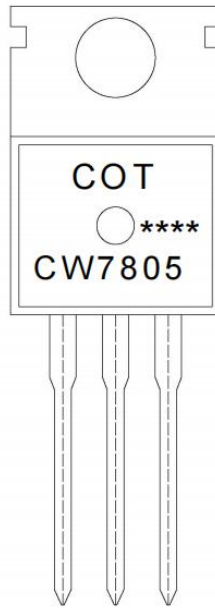
**Electrical Characteristics(Ta=25°C)**

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Output Voltage	$V_O$	$T_J=25^\circ C$	4.8	5.0	5.2	V
		$V_i=7V-20V$ $I_o=5mA-1A$ $P_o \leq 15W$	4.75	5.0	5.25	V
Load Regulation	$\Delta V_{Load}$	$T_J=25^\circ C$ $I_o=5mA-1.5A$			100	mV
		$T_J=25^\circ C$ $I_o=250mA-750mA$			50	mV
Line Regulation	$\Delta V_{Line}$	$T_J=25^\circ C$ $V_i=7V-25V$		3.0	100	mV
		$T_J=25^\circ C$ $V_i=8V-12V$		1.0	50	mV
Quiescent Current	$I_q$	$T_J=25^\circ C$			8.0	mA
Quiescent Current Change	$\Delta I_q$	$V_i=7V-25V$			0.8	mA
		$I_o=5mA-1A$			0.5	mA
Output Voltage Drift	$\Delta V_o / \Delta T$	$I_o=5mA$		-1.1		mV/°C
Output Noise Voltage	eN	B=10Hz-100KHz $T_J=25^\circ C$			40	$\mu V/V_o$
Supply Voltage Rejection	SVR	$V_i=8V-18V$ $f=120Hz$	62			dB
Dropout Voltage	$V_d$	$I_o=1A$ $T_J=25^\circ C$		2.0		V
Output Resistance	$R_o$	$f=1KHz$		17		m $\Omega$
Short Circuit Current	$I_{sc}$	$V_i=35V$ $T_J=25^\circ C$		0.75		A
Short Circuit Peak Current	$I_{scp}$	$T_J=25^\circ C$		2.2		A

Electrical Characteristic Curve



**Marking Instructions**



Note:

COT: Company Code.

CW7805: Product Type.

\*\*\*\*: Lot No. Code, code change with Lot No.

**Packaging SPEC**

**BULK**

Package Type	Units					Dimension (unit: mm3)		
	Units/Bag	Bags/Inner Box	Units/Inner Box	Inner Boxes/Outer Box	Units/Outer Box	Bag	Inner Box	Outer Box
TO-220/F	200	10	2,000	5	10,000	135×190	237×172×102	560×245×195

**TUBE**

Package Type	Units					Dimension (unit: mm3)		
	Units/Tube	Tubes/Inner Box	Units/Inner Box	Inner Boxes/Outer Box	Units/Outer Box	Tube	Inner Box	Outer Box
TO-220/F	50	20	1,000	5	5,000	532×31.4×5.5	555×164×50	575×290×180

Package Dimensions

T0-220

单位: mm

