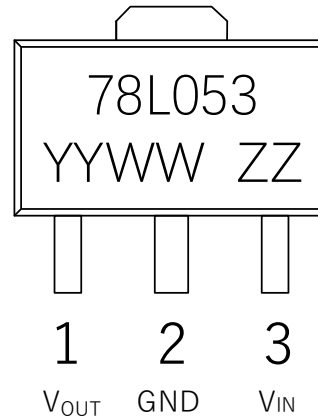


FEATURES

- Maximum Output Current: 0.1A
- Output Voltage: 5.35V
- Thermal Overload Protection
- 2% Output Voltage Accuracy
- SOT89-3L



PIN CONNECTION

- “YY” STANDS FOR THE ASSEMBLY YEAR.
- “WW” STANDS FOR THE ASSEMBLY WEEK
- “ZZ” STANDS FOR THE ASSEMBLY FACTORY.

Absolute Maximum Ratings (Ta=25°C)

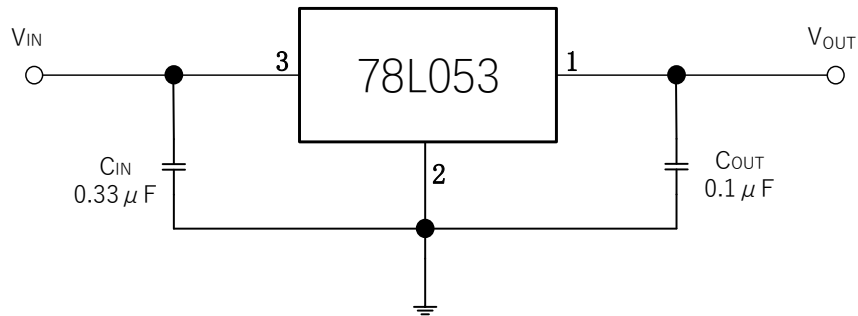
Characteristics	Symbol	Value	Unit
Input Voltage	V_i	42	V
Operating Junction Temperature Range	T_j	-40~+125	°C
Power Dissipation	P_d	750	mW
Operating Temperature Range	T_{opr}	-40~+85	°C
Storage Temperature Range	T_{stg}	-40~+150	°C

ELECTRICAL CHARACTERISTICS

(unless otherwise noted, $V_i=10V, I_o=40mA, -30 < T_j < 85^\circ C, C_1=0.33\mu F, C_o=0.1\mu F$) (Note1)

Characteristics	Test Conditions	Symbol	Min	Typ	Max	Unit
Output Voltage	$T_j=25^\circ C$	V_o	5.25	5.35	5.45	V
	$7.8V \leq V_i \leq 20V; I_o=1mA \sim 40mA$		5.15		5.55	V
	$7.8V \leq V_i \leq V_{max}; I_o=1mA \sim 70mA$		5.15		5.55	V
Load Regulation	$T_j=25^\circ C; I_o=1mA \sim 100mA$	ΔV_o		11	60	mV
	$T_j=25^\circ C; I_o=1mA \sim 40mA$			5	6	mV
Line Regulation	$T_j=25^\circ C; 7.5V \leq V_i \leq 20V$	ΔV_o		8	150	mV
	$T_j=25^\circ C; 8V \leq V_i \leq 20V$			6	100	mV
Quiescent Current		I_q		3	5.5	mA
Quiescent Current Change	$8V \leq V_i \leq 20V$	ΔI_q			1.5	mA
	$1mA \leq I_o \leq 40mA$				0.2	mA
Output Noise Voltage	$10Hz \leq f \leq 100kHz$	V_N		63		μV
Temperature Coefficient	$I_o=5mA$	$\Delta V_o / \Delta T$		0.65		mV/°C
Ripple Rejection	$10V \leq V_i \leq 20V; f=120Hz; T_j=25^\circ C$	RR	41	60		dB
Dropout Voltage	$T_j=25^\circ C$	V_d		2.5		V

APPLICATION CIRCUIT



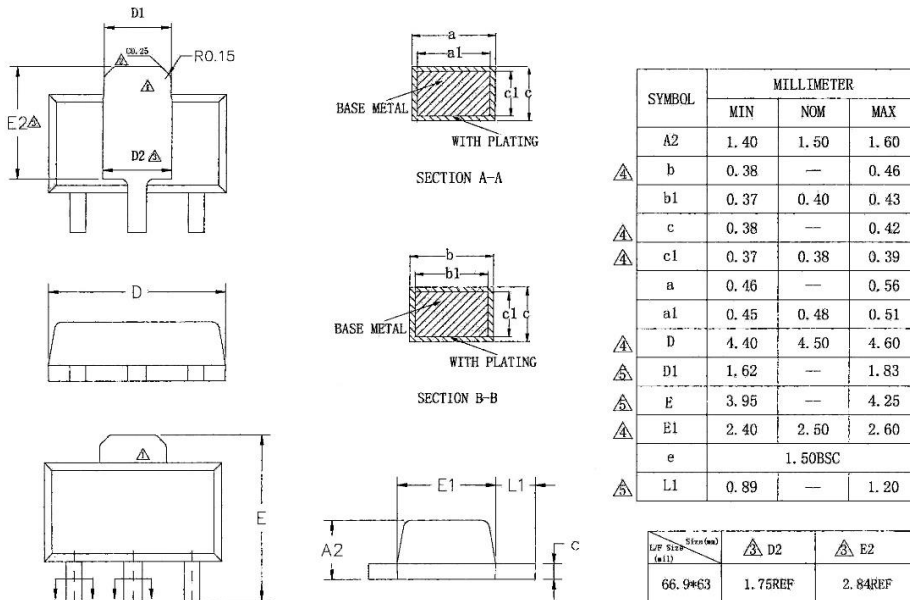
*Bypass capacitors are recommended for optimum stability and transient response and should be located as close as Possible to the regulators.

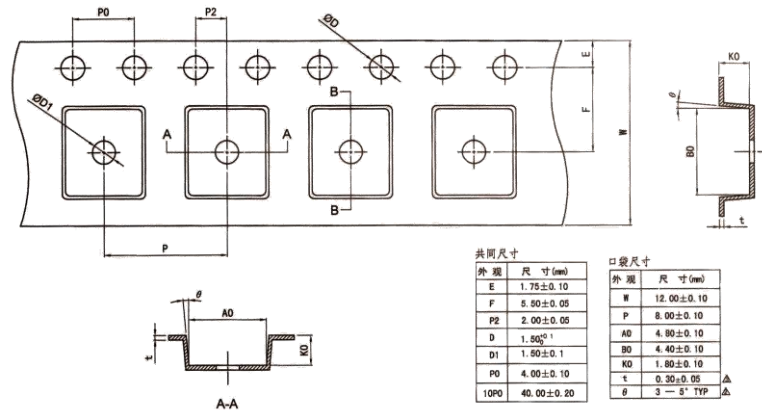
ORDER INFORMATION

1	BL78L053	SOT89-3L	Packaged by Tianshui Huatian Technology
2	BL78L053-P	SOT89-3L	Packaged by Wuxi Hongguang Electronic Limited

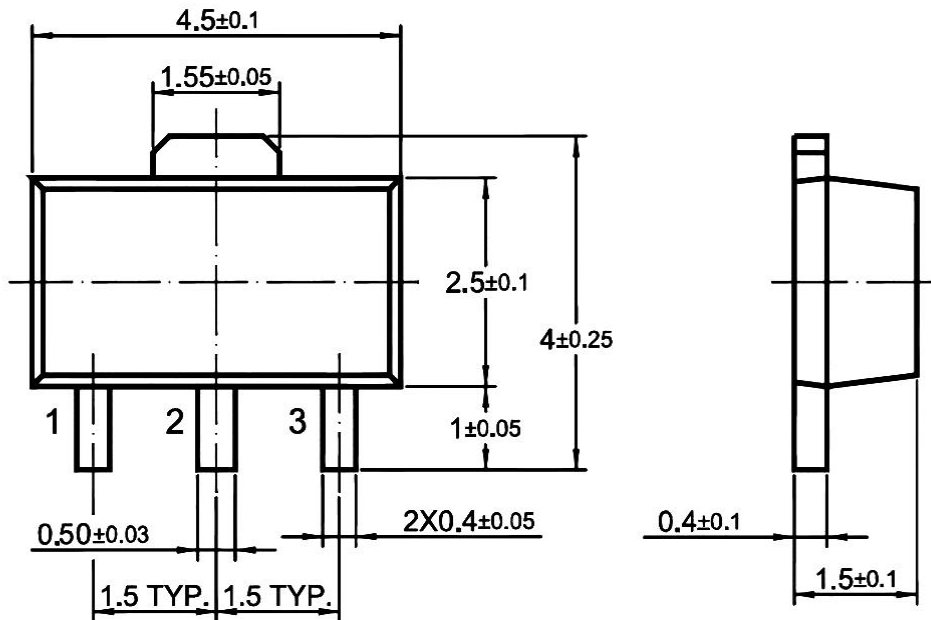
OUTLINEDRAWING & Tray information

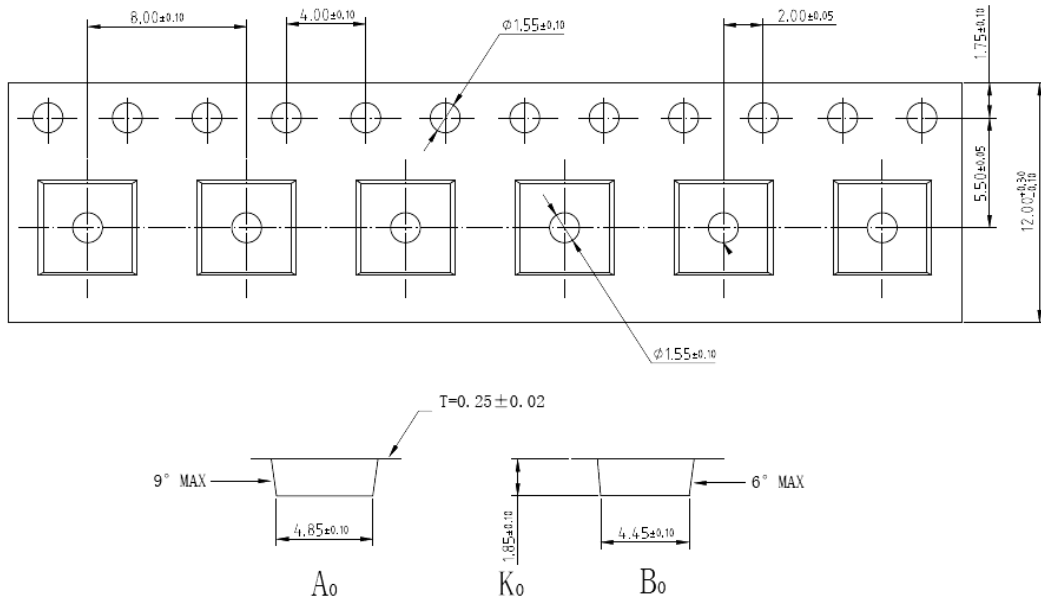
1. BL78L053 (SOT89-3L) Humidity sensitivity level : MSL 3





2.BL78L053-P (SOT89-3L) Humidity sensitivity level : MSL 1





Storage conditions and packaging

- Warranty period: Two Years
- Packing method: Tape
- Minimum packaging: 1000