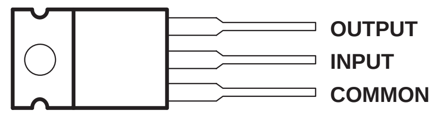
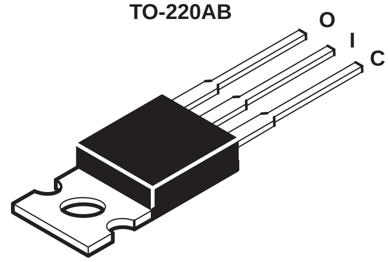
- **3-Terminal Regulators**
- **Output Current Up to 500 mA**
- **No External Components**
- **High Power Dissipation Capability**
- **Internal Short-Circuit Current Limiting**
- **Output Transistor Safe-Area Compensation**
- **Direct Replacements for Fairchild μA79M00 Series**

KC PACKAGE (TOP VIEW)

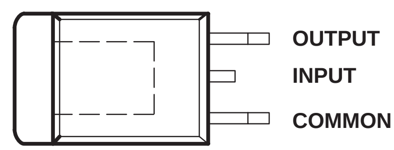


The input terminal is in electrical contact with the mounting base.

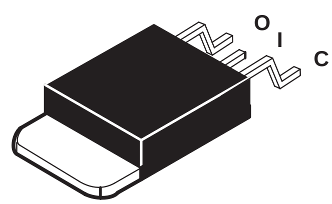
TO-220AB



KTP PACKAGE (TOP VIEW)



The input terminal is in electrical contact with the mounting base.



description

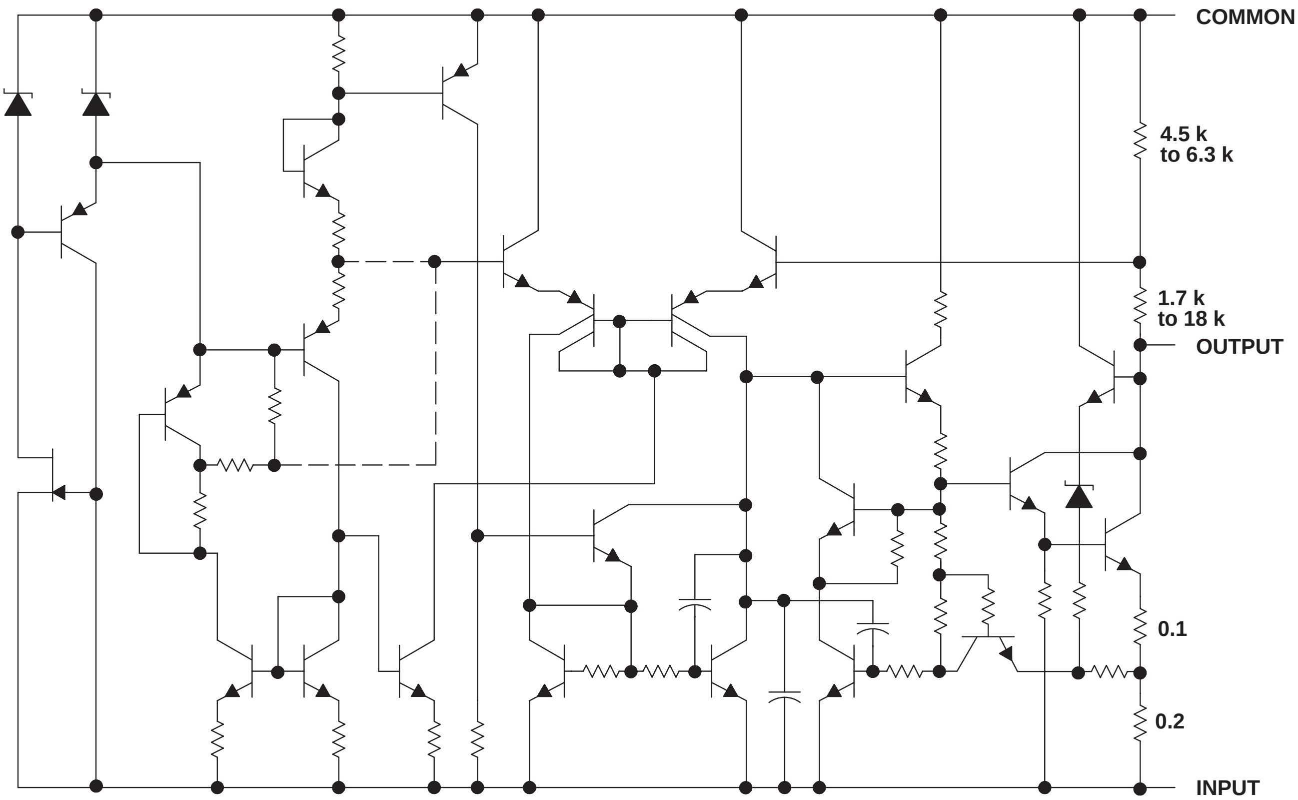
This series of fixed-negative-voltage monolithic integrated-circuit voltage regulators is designed to complement the μA78M00 series in a wide range of applications. These applications include on-card regulation for elimination of noise and distribution problems associated with single-point regulation. Each of these regulators can deliver up to 500 mA of output current. The internal current limiting and thermal shutdown features of these regulators make them essentially immune to overload. In addition to use as fixed-voltage regulators, these devices can be used with external components to obtain adjustable output voltages and currents and also as the power pass element in precision regulators.

AVAILABLE OPTIONS

T_A	V_O(nom) (V)	PACKAGED DEVICES		CHIP FORM (Y)
		HEAT-SINK MOUNTED (KC)	PLASTIC FLANGE MOUNTED† (KTP)	
0°C to 125°C	–5	μA79M05CKC	μA79M05CKTP	μA79M05Y
	–6	μA79M06CKC	μA79M06CKTP	μA79M06Y
	–8	μA79M08CKC	μA79M08CKTP	μA79M08Y
	–12	μA79M12CKC	μA79M12CKTP	μA79M12Y
	–15	μA79M15CKC	μA79M15CKTP	μA79M15Y
	–20	μA79M20CKC	μA79M20CKTP	μA79M20Y
	–24	μA79M24CKC	μA79M24CKTP	μA79M24Y

† The KTP package is also available in tape and reel.

schematic

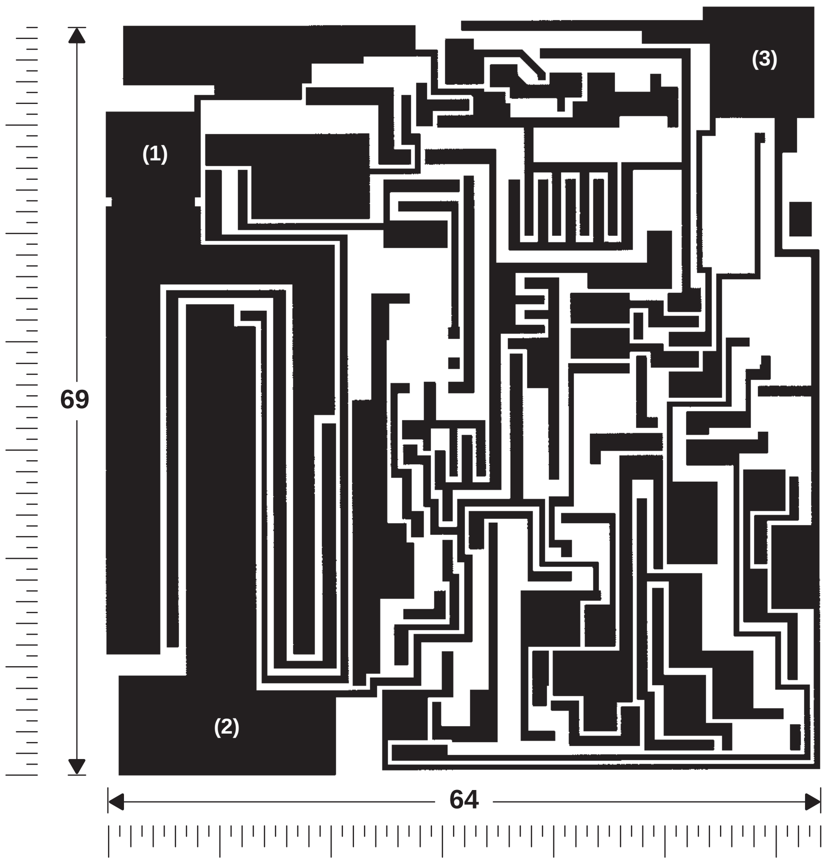


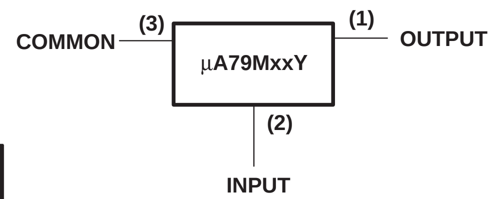
Resistor values shown are nominal and in Ω.

μA79MxxY chip information

This chip, when properly assembled, displays characteristics similar to the μA79MxxC. Thermal compression or ultrasonic bonding can be used on the doped aluminum bonding pads. The chip can be mounted with conductive epoxy or a gold-silicon preform.

BONDING PAD ASSIGNMENTS





CHIP THICKNESS: 11 MILS TYPICAL
BONDING PADS: 7 X 7 MILS MINIMUM
$T_J$max = 150°C
TOLERANCES ARE ±10%
ALL DIMENSIONS ARE IN MILS

absolute maximum ratings over operating temperature range (unless otherwise noted)†

		µA79MxxC	UNIT
Input voltage	µA79M20, µA79M24	−40	V
	All others	−35	
Continuous total power dissipation (see Note 1)		See Dissipation Rating Tables 1 and 2	
Operating free-air, T_A, case, T_C, or virtual junction, T_J, temperature range		0 to 150	°C
Storage temperature range, T_{stg}		−65 to 150	°C
Lead temperature 1,6 mm (1/16 inch) from case for 10 seconds		260	°C

† Stresses beyond those listed under “absolute maximum ratings” may cause permanent damage to the device. These are stress ratings only, and functional operation of the device at these or any other conditions beyond those indicated under “recommended operating conditions” is not implied. Exposure to absolute-maximum-rated conditions for extended periods may affect device reliability.

NOTE 1: To avoid exceeding the design maximum virtual junction temperature, these ratings should not be exceeded. Due to variations in individual device electrical characteristics and thermal resistance, the built-in thermal overload protection may be activated at power levels slightly above or below the rated dissipation.

DISSIPATION RATING TABLE 1–FREE-AIR TEMPERATURE

PACKAGE	$T_A \le 25°C$ POWER RATING	DERATING FACTOR ABOVE $T_A = 25°C$	$T_A = 70°C$ POWER RATING	$T_A = 125°C$ POWER RATING
KC	2000 mW	16.0 mW/°C	1280 mW	400 mW
KTP	1800 mW	14.5 mW/°C	1147 mW	350 mW

DISSIPATION RATING TABLE 2–CASE TEMPERATURE

PACKAGE	$T_C \le 120°C$ POWER RATING	DERATING FACTOR ABOVE $T_C = 120°C$	$T_C = 125°C$ POWER RATING
KC	20000 mW	200.0 mW/°C	5000 mW
KTP	18000 mW	181.1 mW/°C	4365 mW

recommended operating conditions

		MIN	MAX	UNIT
Input voltage, V_I	µA79M05C	−7	−25	V
	µA79M06C	−8	−25	
	µA79M08C	−10.5	−25	
	µA79M12C	−14.5	30	
	µA79M15C	−17.5	−30	
	µA79M20C	−23	−35	
	µA79M24C	−27	−38	
Output current, I_O			500	mA
Operating virtual junction temperature, T_J		0	125	°C

electrical characteristics at specified virtual junction temperature, $V_I = -10$ V, $I_O = 350$ mA, $T_J = 25°C$ (unless otherwise noted)

PARAMETER	TEST CONDITIONS†		μA79M05C MIN	μA79M05C TYP	μA79M05C MAX	UNIT
Output voltage‡			–4.8	–5	–5.2	V
	V_I = –7 V to –25 V, T_J = 0°C to 125°C	I_O = 5 mA to 350 mA,	–4.75		–5.25	
Input voltage regulation	V_I = –7 V to –25 V			7	50	mV
	V_I = –8 V to –18 V			3	30	
Ripple rejection	V_I = –8 V to –18 V, f = 120 Hz	I_O = 100 mA, T_J = 0°C to 125°C	50			dB
		I_O = 300 mA	54	60		
Output voltage regulation	I_O = 5 mA to 500 mA			75	100	mV
	I_O = 5 mA to 350 mA			50		
Temperature coefficient of output voltage	I_O = 5 mA,	T_J = 0°C to 125°C		–0.4		mV/°C
Output noise voltage	f = 10 Hz to 100 kHz			125		μV
Dropout voltage				1.1		V
Bias current				1	2	mA
Bias current change	V_I = –8 V to –18 V,	T_J = 0°C to 125°C			0.4	mA
	I_O = 5 mA to 350 mA,	T_J = 0°C to 125°C			0.4	
Short-circuit output current	V_I = –30 V			140		mA
Peak output current				0.65		A

† Pulse-testing techniques maintain T_J as close to T_A as possible. Thermal effects must be taken into account separately. All characteristics are measured with a 2-μF capacitor across the input and a 1-μF capacitor across the output.
‡ This specification applies only for dc power dissipation permitted by absolute maximum ratings.

electrical characteristics at specified virtual junction temperature, $V_I = -11$ V, $I_O = 350$ mA, $T_J = 25°C$ (unless otherwise noted)

PARAMETER	TEST CONDITIONS†		μA79M06C MIN	μA79M06C TYP	μA79M06C MAX	UNIT
Output voltage‡			–5.75	–6	–6.25	V
	V_I = –8 V to –25 V, T_J = 0°C to 125°C	I_O = 5 mA to 350 mA,	–5.7		–6.3	
Input voltage regulation	V_I = –8 V to –25 V			7	60	mV
	V_I = –9 V to –19 V			3	40	
Ripple rejection	V_I = –9 V to –19 V, f = 120 Hz	I_O = 100 mA, T_J = 0°C to 125°C	50			dB
		I_O = 300 mA	54	60		
Output voltage regulation	I_O = 5 mA to 500 mA			80	120	mV
	I_O = 5 mA to 350 mA			55		
Temperature coefficient of output voltage	I_O = 5 mA,	T_J = 0°C to 125°C		–0.4		mV/°C
Output noise voltage	f = 10 Hz to 100 kHz			150		μV
Dropout voltage				1.1		V
Bias current				1	2	mA
Bias current change	V_I = –9 V to –25 V,	T_J = 0°C to 125°C			0.4	mA
	I_O = 5 mA to 350 mA,	T_J = 0°C to 125°C			0.4	
Short-circuit output current	V_I = –30 V			140		mA
Peak output current				0.65		A

† Pulse-testing techniques maintain T_J as close to T_A as possible. Thermal effects must be taken into account separately. All characteristics are measured with a 2-μF capacitor across the input and a 1-μF capacitor across the output.
‡ This specification applies only for dc power dissipation permitted by absolute maximum ratings.

electrical characteristics at specified virtual junction temperature, $V_I = -19$ V, $I_O = 350$ mA, $T_J = 25°C$ (unless otherwise noted)

PARAMETER	TEST CONDITIONS†	μA79M08C MIN	μA79M08C TYP	μA79M08C MAX	UNIT
Output voltage‡		–7.7	–8	–8.3	V
	$V_I = -10.5$ V to –25 V, $I_O = 5$ mA to 350 mA, $T_J = 0°C$ to 125°C	–7.6		–8.4	
Input voltage regulation	$V_I = -10.5$ V to –25 V		8	80	mV
	$V_I = -11$ V to –21 V		4	50	
Ripple rejection	$V_I = -11.5$ V to –21.5 V, f = 120 Hz, $I_O = 100$ mA, $T_J = 0°C$ to 125°C	50			dB
	$V_I = -11.5$ V to –21.5 V, f = 120 Hz, $I_O = 300$ mA	54	59		
Output voltage regulation	$I_O = 5$ mA to 500 mA		90	160	mV
	$I_O = 5$ mA to 350 mA		60		
Temperature coefficient of output voltage	$I_O = 5$ mA, $T_J = 0°C$ to 125°C		–0.6		mV/°C
Output noise voltage	f = 10 Hz to 100 kHz		200		μV
Dropout voltage	$I_O = 5$ mA		1.1		V
Bias current			1	2	mA
Bias current change	$V_I = -10.5$ V to –25 V, $T_J = 0°C$ to 125°C			0.4	mA
	$I_O = 5$ mA to 350 mA, $T_J = 0°C$ to 125°C			0.4	
Short-circuit output current	$V_I = -30$ V		140		mA
Peak output current			0.65		A

† Pulse-testing techniques maintain T_J as close to T_A as possible. Thermal effects must be taken into account separately. All characteristics are measured with a 2-μF capacitor across the input and a 1-μF capacitor across the output.
‡ This specification applies only for dc power dissipation permitted by absolute maximum ratings.

electrical characteristics at specified virtual junction temperature, $V_I = -19$ V, $I_O = 350$ mA, $T_J = 25°C$ (unless otherwise noted)

PARAMETER	TEST CONDITIONS†	μA79M12C MIN	μA79M12C TYP	μA79M12C MAX	UNIT
Output voltage‡		–11.5	–12	–12.5	V
	$V_I = -14.5$ V to –30 V, $I_O = 5$ mA to 350 mA, $T_J = 0°C$ to 125°C	–11.4		–12.6	
Input voltage regulation	$V_I = -14.5$ V to –30 V		9	80	mV
	$V_I = -15$ V to –25 V		5	50	
Ripple rejection	$V_I = -15$V to –25 V, f = 120 Hz, $I_O = 100$ mA, $T_J = 0°C$ to 125°C	50			dB
	$V_I = -15$V to –25 V, f = 120 Hz, $I_O = 300$ mA	54	60		
Output voltage regulation	$I_O = 5$ mA to 500 mA		65	240	mV
	$I_O = 5$ mA to 350 mA		45		
Temperature coefficient of output voltage	$I_O = 5$ mA, $T_J = 0°C$ to 125°C		–0.8		mV/°C
Output noise voltage	f = 10 Hz to 100 kHz		300		μV
Dropout voltage			1.1		V
Bias current			1.5	3	mA
Bias current change	$V_I = -14.5$ V to –30 V, $T_J = 0°C$ to 125°C			0.4	mA
	$I_O = 5$ mA to 350 mA, $T_J = 0°C$ to 125°C			0.4	
Short-circuit output current	$V_I = -30$ V		140		mA
Peak output current			0.65		A

† Pulse-testing techniques maintain T_J as close to T_A as possible. Thermal effects must be taken into account separately. All characteristics are measured with a 2-μF capacitor across the input and a 1-μF capacitor across the output.
‡ This specification applies only for dc power dissipation permitted by absolute maximum ratings.

electrical characteristics at specified virtual junction temperature, $V_I = -23$ V, $I_O = 350$ mA, $T_J = 25°C$ (unless otherwise noted)

PARAMETER	TEST CONDITIONS†		μA79M15C MIN	TYP	MAX	UNIT
Output voltage‡			–14.4	–15	–15.6	V
	$V_I = -17.5$ V to -30 V, $T_J = 0°C$ to $125°C$	$I_O = 5$ mA to 350 mA,	–14.25		–15.75	
Input voltage regulation	$V_I = -17.5$ V to -30 V			9	80	mV
	$V_I = -18$ V to -28 V			7	50	
Ripple rejection	$V_I = -18.5$ V to -28.5 V, f = 120 Hz	$I_O = 100$ mA, $T_J = 0°C$ to $125°C$	50			dB
		$I_O = 300$ mA	54	59		
Output voltage regulation	$I_O = 5$ mA to 500 mA			65	240	mV
	$I_O = 5$ mA to 350 mA			45		
Temperature coefficient of output voltage	$I_O = 5$ mA,	$T_J = 0°C$ to $125°C$		–1		mV/°C
Output noise voltage	f = 10 Hz to 100 kHz			375		μV
Dropout voltage	$I_O = 5$ mA			1.1		V
Bias current				1.5	3	mA
Bias current change	$V_I = -17.5$ V to -30 V,	$T_J = 0°C$ to $125°C$			0.4	mA
	$I_O = 5$ mA to 350 mA,	$T_J = 0°C$ to $125°C$			0.4	
Short-circuit output current	$V_I = -30$ V			140		mA
Peak output current				0.65		A

† Pulse-testing techniques maintain T_J as close to T_A as possible. Thermal effects must be taken into account separately. All characteristics are measured with a 2-μF capacitor across the input and a 1-μF capacitor across the output.
‡ This specification applies only for dc power dissipation permitted by absolute maximum ratings.

electrical characteristics at specified virtual junction temperature, $V_I = -29$ V, $I_O = 350$ mA, $T_J = 25°C$ (unless otherwise noted)

PARAMETER	TEST CONDITIONS†		μA79M20C MIN	TYP	MAX	UNIT
Output voltage‡			–19.2	–20	–20.8	V
	$V_I = -23$ V to -35 V, $T_J = 0°C$ to $125°C$	$I_O = 5$ mA to 350 mA,	–19		–21	
Input voltage regulation	$V_I = -23$ V to -35 V			12	80	mV
	$V_I = -24$ V to -34 V			10	70	
Ripple rejection	$V_I = -24$ V to -34 V, f = 120 Hz	$I_O = 100$ mA, $T_J = 0°C$ to $125°C$	50			dB
		$I_O = 300$ mA	54	58		
Output voltage regulation	$I_O = 5$ mA to 500 mA			75	300	mV
	$I_O = 5$ mA to 350 mA			50		
Temperature coefficient of output voltage	$I_O = 5$ mA,	$T_J = 0°C$ to $125°C$		–1		mV/°C
Output noise voltage	f = 10 Hz to 100 kHz			500		μV
Dropout voltage				1.1		V
Bias current				1.5	3.5	mA
Bias current change	$V_I = -23$ V to -35 V,	$T_J = 0°C$ to $125°C$			0.4	mA
	$I_O = 5$ mA to 350 mA,	$T_J = 0°C$ to $125°C$			0.4	
Short-circuit output current	$V_I = -30$ V			140		mA
Peak output current				0.65		A

† Pulse-testing techniques maintain T_J as close to T_A as possible. Thermal effects must be taken into account separately. All characteristics are measured with a 2-μF capacitor across the input and a 1-μF capacitor across the output.
‡ This specification applies only for dc power dissipation permitted by absolute maximum ratings.

electrical characteristics at specified virtual junction temperature, $V_I = -33$ V, $I_O = 350$ mA, $T_J = 25°C$ (unless otherwise noted)

PARAMETER	TEST CONDITIONS†		μA79M24C MIN	μA79M24C TYP	μA79M24C MAX	UNIT
Output voltage‡			–23	–24	–25	V
	$V_I = -27$ V to –38 V, $T_J = 0°C$ to 125°C	$I_O = 5$ mA to 350 mA,	–22.8		–25.2	
Input voltage regulation	$V_I = -27$ V to –38 V			12	80	mV
	$V_I = -28$ V to –38 V			12	70	
Ripple rejection	$V_I = -28$ V to –38 V, f = 120 Hz	$I_O = 100$ mA, $T_J = 0°C$ to 125°C	50			dB
		$I_O = 300$ mA	54	58		
Output voltage regulation	$I_O = 5$ mA to 500 mA			75	300	mV
	$I_O = 5$ mA to 350 mA			50		
Temperature coefficient of output voltage	$I_O = 5$ mA,	$T_J = 0°C$ to 125°C		–1		mV/°C
Output noise voltage	f = 10 Hz to 100 kHz			600		μV
Dropout voltage				1.1		V
Bias current				1.5	3.5	mA
Bias current change	$V_I = -27$ V to –38 V,	$T_J = 0°C$ to 125°C			0.4	mA
	$I_O = 5$ mA to 350 mA,	$T_J = 0°C$ to 125°C			0.4	
Short-circuit output current	$V_I = -30$ V			140		mA
Peak output current				0.65		A

† Pulse-testing techniques maintain T_J as close to T_A as possible. Thermal effects must be taken into account separately. All characteristics are measured with a 2-μF capacitor across the input and a 1-μF capacitor across the output.
‡ This specification applies only for dc power dissipation permitted by absolute maximum ratings.

electrical characteristics at specified virtual junction temperature, $V_I = -10$ V, $I_O = 350$ mA, $T_J = 25°C$ (unless otherwise noted)

PARAMETER	TEST CONDITIONS†	µA79M05Y			UNIT
		MIN	TYP	MAX	
Output voltage‡			–5		V
Input voltage regulation	$V_I = -7$ V to –25 V		7		mV
	$V_I = -8$ V to –18 V		3		
Ripple rejection	$V_I = -8$ V to –18 V, $I_O = 300$ mA, f = 120 Hz		60		dB
Output voltage regulation	$I_O = 5$ mA to 500 mA		75		mV
	$I_O = 5$ mA to 350 mA		50		
Temperature coefficient of output voltage	$I_O = 5$ mA		–0.4		mV/°C
Output noise voltage	f = 10 Hz to 100 kHz		125		µV
Dropout voltage			1.1		V
Bias current			1		mA
Short-circuit output current	$V_I = -30$ V		140		mA
Peak output current			0.65		A

† Pulse-testing techniques maintain T_J as close to T_A as possible. Thermal effects must be taken into account separately. All characteristics are measured with a 2-µF capacitor across the input and a 1-µF capacitor across the output.
‡ This specification applies only for dc power dissipation permitted by absolute maximum ratings.

electrical characteristics at specified virtual junction temperature, $V_I = -11$ V, $I_O = 350$ mA, $T_J = 25°C$ (unless otherwise noted)

PARAMETER	TEST CONDITIONS†	µA79M06Y			UNIT
		MIN	TYP	MAX	
Output voltage‡			–6		V
Input voltage regulation	$V_I = -8$ V to –25 V		7		mV
	$V_I = -9$ V to –19 V		3		
Ripple rejection	$V_I = -9$ V to –19 V, $I_O = 300$ mA, f = 120 Hz		60		dB
Output voltage regulation	$I_O = 5$ mA to 500 mA		80		mV
	$I_O = 5$ mA to 350 mA		55		
Temperature coefficient of output voltage	$I_O = 5$ mA		–0.4		mV/°C
Output noise voltage	f = 10 Hz to 100 kHz		150		µV
Dropout voltage			1.1		V
Bias current			1		mA
Short-circuit output current	$V_I = -30$ V		140		mA
Peak output current			0.65		A

† Pulse-testing techniques maintain T_J as close to T_A as possible. Thermal effects must be taken into account separately. All characteristics are measured with a 2-µF capacitor across the input and a 1-µF capacitor across the output.
‡ This specification applies only for dc power dissipation permitted by absolute maximum ratings.

electrical characteristics at specified virtual junction temperature, $V_I = -19$ V, $I_O = 350$ mA, $T_J = 25°C$ (unless otherwise noted)

PARAMETER	TEST CONDITIONS†	μA79M08Y			UNIT
		MIN	TYP	MAX	
Output voltage‡			–8		V
Input voltage regulation	V_I = –10.5 V to –25 V		8		mV
	V_I = –11 V to –21 V		4		
Ripple rejection	V_I = –11.5 V to –21.5 V, I_O = 300 mA, f = 120 Hz		59		dB
Output voltage regulation	I_O = 5 mA to 500 mA		90		mV
	I_O = 5 mA to 350 mA		60		
Temperature coefficient of output voltage	I_O = 5 mA		–0.6		mV/°C
Output noise voltage	f = 10 Hz to 100 kHz		200		μV
Dropout voltage	I_O = 5 mA		1.1		V
Bias current			1		mA
Short-circuit output current	V_I = –30 V		140		mA
Peak output current			0.65		A

† Pulse-testing techniques maintain T_J as close to T_A as possible. Thermal effects must be taken into account separately. All characteristics are measured with a 2-μF capacitor across the input and a 1-μF capacitor across the output.
‡ This specification applies only for dc power dissipation permitted by absolute maximum ratings.

electrical characteristics at specified virtual junction temperature, $V_I = -19$ V, $I_O = 350$ mA, $T_J = 25°C$ (unless otherwise noted)

PARAMETER	TEST CONDITIONS†	μA79M12Y			UNIT
		MIN	TYP	MAX	
Output voltage‡			–12		V
Input voltage regulation	V_I = –14.5 V to –30 V		9		mV
	V_I = –15 V to –25 V		5		
Ripple rejection	V_I = –15V to –25 V, I_O = 300 mA, f = 120 Hz		60		dB
Output voltage regulation	I_O = 5 mA to 500 mA		65		mV
	I_O = 5 mA to 350 mA		45		
Temperature coefficient of output voltage	I_O = 5 mA		–0.8		mV/°C
Output noise voltage	f = 10 Hz to 100 kHz		300		μV
Dropout voltage			1.1		V
Bias current			1.5		mA
Short-circuit output current	V_I = –30 V		140		mA
Peak output current			0.65		A

† Pulse-testing techniques maintain T_J as close to T_A as possible. Thermal effects must be taken into account separately. All characteristics are measured with a 2-μF capacitor across the input and a 1-μF capacitor across the output.
‡ This specification applies only for dc power dissipation permitted by absolute maximum ratings.

electrical characteristics at specified virtual junction temperature, $V_I = -23$ V, $I_O = 350$ mA, $T_J = 25°C$ (unless otherwise noted)

PARAMETER	TEST CONDITIONS†	µA79M15Y MIN	µA79M15Y TYP	µA79M15Y MAX	UNIT
Output voltage‡			–15		V
Input voltage regulation	$V_I = -17.5$ V to –30 V		9		mV
	$V_I = -18$ V to –28 V		7		
Ripple rejection	$V_I = -18.5$ V to –28.5 V, $I_O = 300$ mA, f = 120 Hz		59		dB
Output voltage regulation	$I_O = 5$ mA to 500 mA		65		mV
	$I_O = 5$ mA to 350 mA		45		
Temperature coefficient of output voltage	$I_O = 5$ mA		–1		mV/°C
Output noise voltage	f = 10 Hz to 100 kHz		375		µV
Dropout voltage	$I_O = 5$ mA		1.1		V
Bias current			1.5		mA
Short-circuit output current	$V_I = -30$ V		140		mA
Peak output current			0.65		A

† Pulse-testing techniques maintain T_J as close to T_A as possible. Thermal effects must be taken into account separately. All characteristics are measured with a 2-µF capacitor across the input and a 1-µF capacitor across the output.
‡ This specification applies only for dc power dissipation permitted by absolute maximum ratings.

electrical characteristics at specified virtual junction temperature, $V_I = -29$ V, $I_O = 350$ mA, $T_J = 25°C$ (unless otherwise noted)

PARAMETER	TEST CONDITIONS†	µA79M20Y MIN	µA79M20Y TYP	µA79M20Y MAX	UNIT
Output voltage‡			–20		V
Input voltage regulation	$V_I = -23$ V to –35 V		12		mV
	$V_I = -24$ V to –34 V		10		
Ripple rejection	$V_I = -24$ V to –34 V, $I_O = 300$ mA, f = 120 Hz		58		dB
Output voltage regulation	$I_O = 5$ mA to 500 mA		75		mV
	$I_O = 5$ mA to 350 mA		50		
Temperature coefficient of output voltage	$I_O = 5$ mA		–1		mV/°C
Output noise voltage	f = 10 Hz to 100 kHz		500		µV
Dropout voltage			1.1		V
Bias current			1.5		mA
Short-circuit output current	$V_I = -30$ V		140		mA
Peak output current			0.65		A

† Pulse-testing techniques maintain T_J as close to T_A as possible. Thermal effects must be taken into account separately. All characteristics are measured with a 2-µF capacitor across the input and a 1-µF capacitor across the output.
‡ This specification applies only for dc power dissipation permitted by absolute maximum ratings.

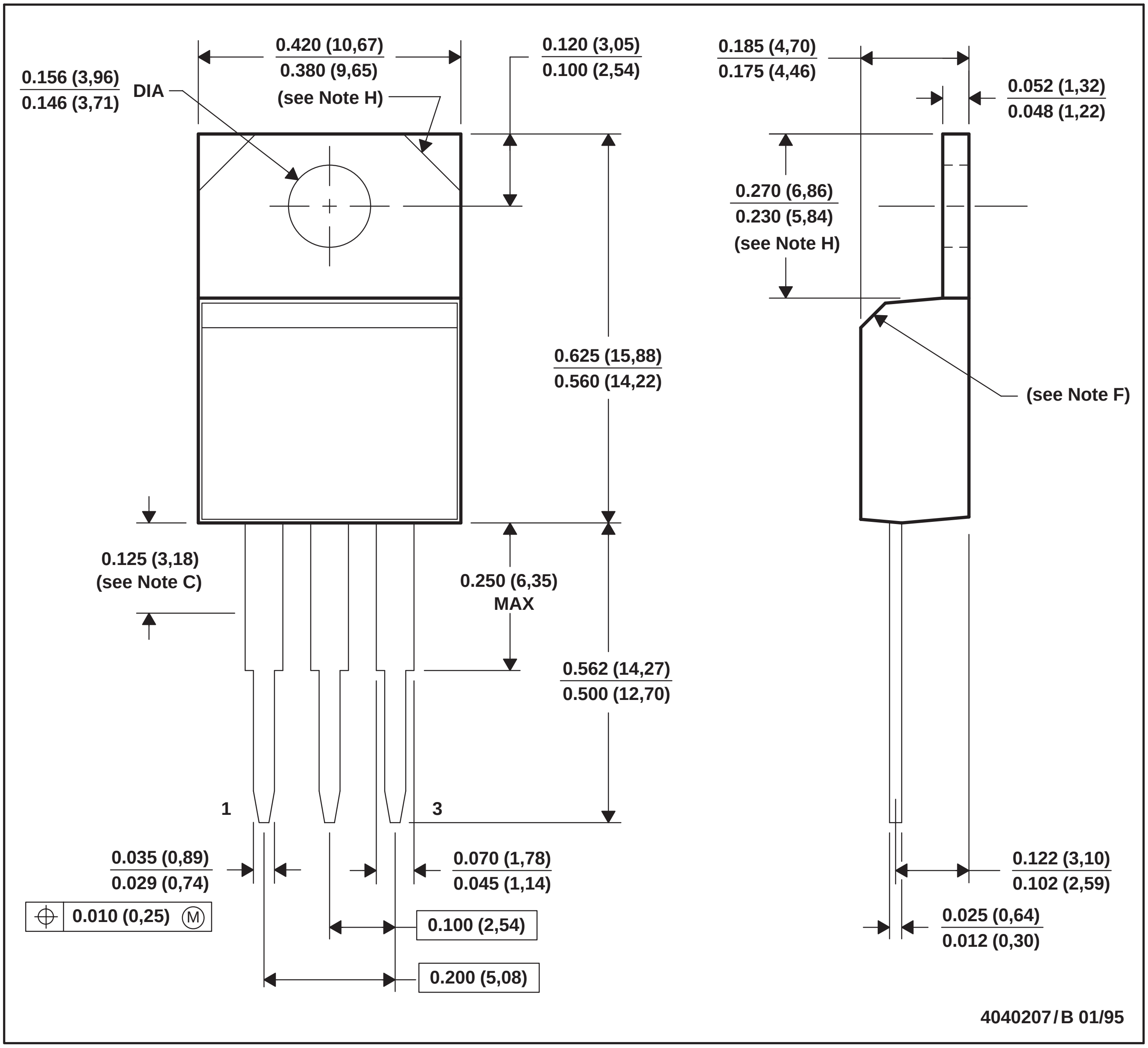
electrical characteristics at specified virtual junction temperature, $V_I = -33$ V, $I_O = 350$ mA, $T_J = 25°C$ (unless otherwise noted)

PARAMETER	TEST CONDITIONS†	μA79M24Y			UNIT
		MIN	TYP	MAX	
Output voltage‡			–24		V
Input voltage regulation	V_I = –27 V to –38 V		12		mV
	V_I = –28 V to –38 V		12		
Ripple rejection	V_I = –28 V to –38 V, I_O = 300 mA, f = 120 Hz		58		dB
Output voltage regulation	I_O = 5 mA to 500 mA		75		mV
	I_O = 5 mA to 350 mA		50		
Temperature coefficient of output voltage	I_O = 5 mA, T_J = 0°C to 125°C		–1		mV/°C
Output noise voltage	f = 10 Hz to 100 kHz		600		μV
Dropout voltage			1.1		V
Bias current			1.5		mA
Short-circuit output current	V_I = –30 V		140		mA
Peak output current			0.65		A

† Pulse-testing techniques maintain T_J as close to T_A as possible. Thermal effects must be taken into account separately. All characteristics are measured with a 2-μF capacitor across the input and a 1-μF capacitor across the output.
‡ This specification applies only for dc power dissipation permitted by absolute maximum ratings.

MECHANICAL INFORMATION

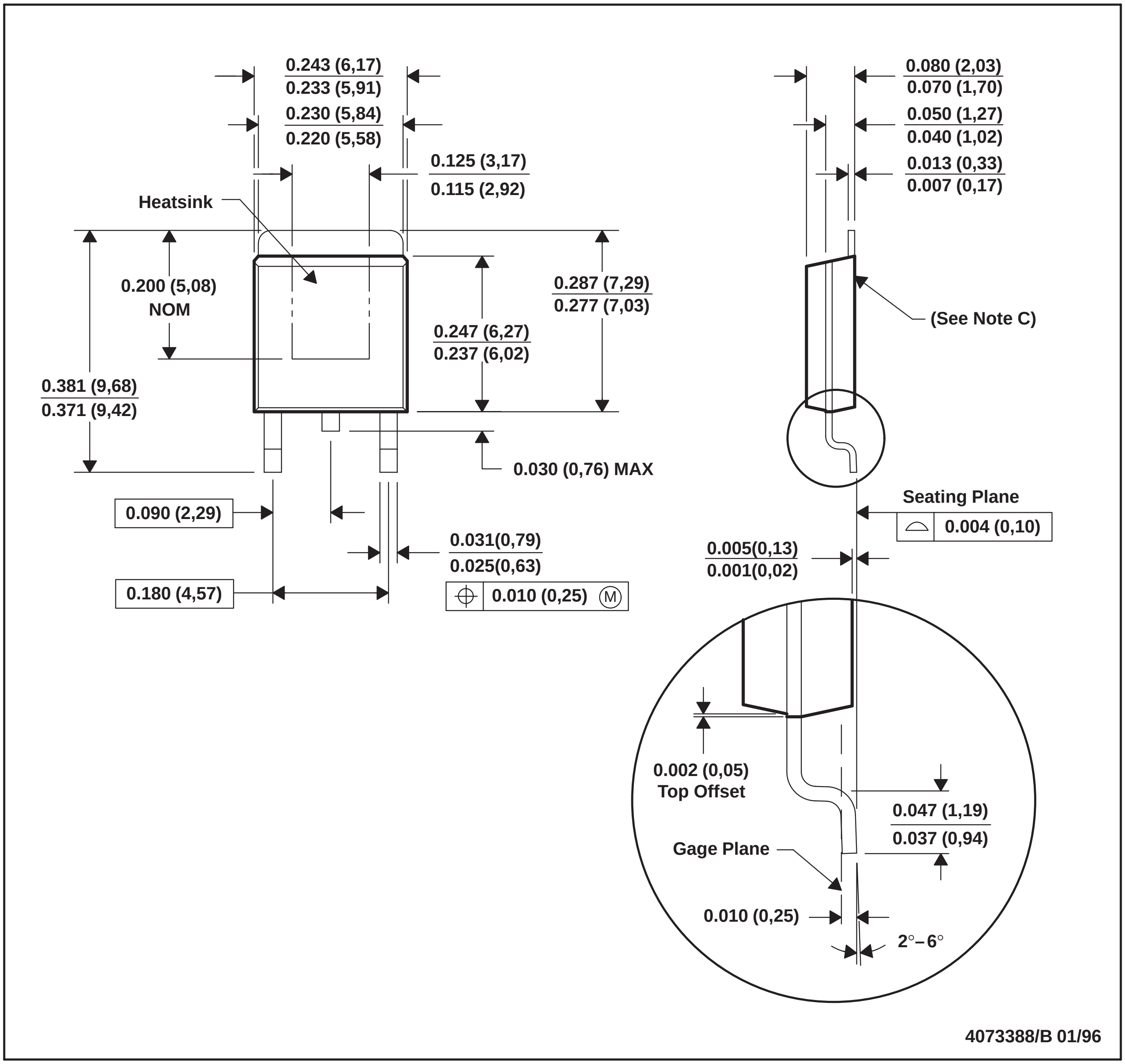
KC (R-PSFM-T3) **PLASTIC FLANGE-MOUNT PACKAGE**



NOTES:
A. All linear dimensions are in inches (millimeters).
B. This drawing is subject to change without notice.
C. Lead dimensions are not controlled within this area.
D. All lead dimensions apply before solder dip.
E. The center lead is in electrical contact with the mounting tab.
F. The chamfer is optional.
G. Falls within JEDEC TO-220AB
H. Tab contour optional within these dimensions

MECHANICAL INFORMATION

KTP (R-PSFM-T3) **PLASTIC FLANGE-MOUNT PACKAGE**



NOTES: A. All linear dimensions are in inches (millimeters).
B. This drawing is subject to change without notice.
C. The heatsink area is approximately 28K sq mils.

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