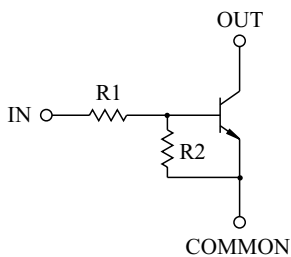


SWITCHING APPLICATION.  
INTERFACE CIRCUIT AND DRIVER CIRCUIT APPLICATION.

### FEATURES

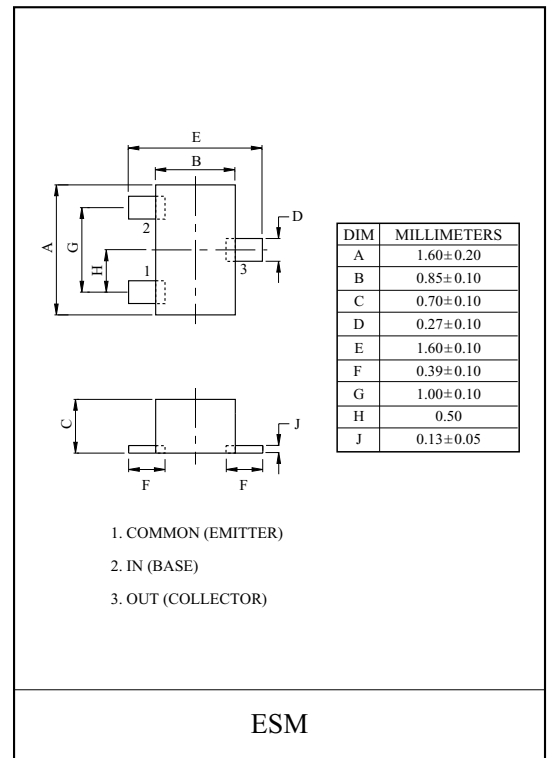
- With Built-in Bias Resistors.
- Simplify Circuit Design.
- Reduce a Quantity of Parts and Manufacturing Process.
- High Packing Density.

### EQUIVALENT CIRCUIT



### BIAS RESISTOR VALUES

TYPE NO.	R1(k )	R2(k )
KRC401E	4.7	4.7
KRC402E	10	10
KRC403E	22	22
KRC404E	47	47
KRC405E	2.2	47
KRC406E	4.7	47



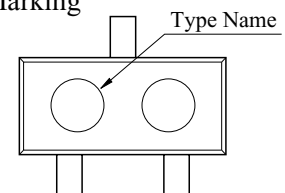
### MAXIMUM RATING (Ta=25 )

CHARACTERISTIC		SYMBOL	RATING	UNIT
Output Voltage	KRC401E 406E	$V_o$	50	V
Input Voltage	KRC401E	$V_i$	20, -10	V
	KRC402E		30, -10	
	KRC403E		40, -10	
	KRC404E		40, -10	
	KRC405E		12, -5	
	KRC406E		20, -5	
Output Current	KRC401E 406E	$I_o$	100	mA
Power Dissipation		$P_D$	100	mW
Junction Temperature		$T_j$	150	
Storage Temperature Range		$T_{stg}$	-55 150	

### MARK SPEC

TYPE	KRC401E	KRC402E	KRC403E	KRC404E	KRC405E	KRC406E
MARK	NA	NB	NC	ND	NE	NF

### Marking



# KRC401E~KRC406E

## ELECTRICAL CHARACTERISTICS (Ta=25 °C)

CHARACTERISTIC		SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Output Cut-off Current	KRC401E 406E	$I_{O(OFF)}$	$V_O=50V, V_I=0$	-	-	500	nA
DC Current Gain	KRC401E	$G_I$	$V_O=5V, I_O=10mA$	30	55	-	
	KRC402E			50	80	-	
	KRC403E			70	120	-	
	KRC404E			80	200	-	
	KRC405E			80	200	-	
	KRC406E			80	200	-	
Output Voltage	KRC401E 406E	$V_{O(ON)}$	$I_O=10mA, I_I=0.5mA$	-	0.1	0.3	V
Input Voltage (ON)	KRC401E	$V_{I(ON)}$	$V_O=0.2V, I_O=5mA$	-	1.5	2.0	V
	KRC402E			-	1.8	2.4	
	KRC403E			-	2.1	3.0	
	KRC404E			-	2.8	5.0	
	KRC405E			-	0.8	1.1	
	KRC406E			-	0.9	1.3	
Input Voltage (OFF)	KRC401E 404E	$V_{I(OFF)}$	$V_O=5V, I_O=0.1mA$	1.0	1.2	-	V
	KRC405E 406E			0.5	0.65	-	
Transition Frequency	KRC401E 406E	$f_T^*$	$V_O=10V, I_O=5mA$	-	200	-	MHz
Input Current	KRC401E	$I_I$	$V_I=5V$	-	-	1.8	mA
	KRC402E			-	-	0.88	
	KRC403E			-	-	0.36	
	KRC404E			-	-	0.18	
	KRC405E			-	-	3.6	
	KRC406E			-	-	1.8	
Input Resistor	KRC401E	R1	-	3.29	4.7	6.11	k
	KRC402E			7	10	13	
	KRC403E			15.4	22	28.6	
	KRC404E			32.9	47	61.1	
	KRC405E			1.54	2.2	2.86	
	KRC406E			3.29	4.7	6.11	
Resistor Ratio	KRC401E 404E	R2/R1	-	0.8	1.0	1.2	
	KRC405E			17	21	26	
	KRC406E			8	10	12	

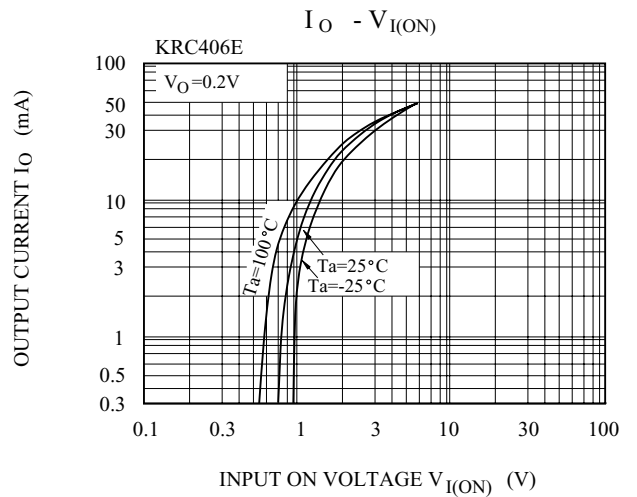
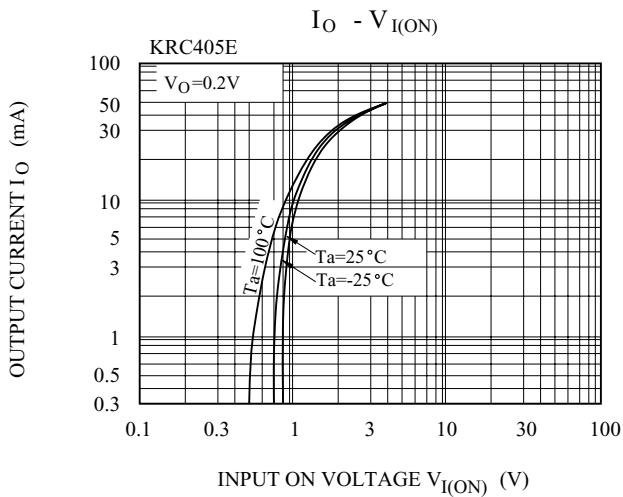
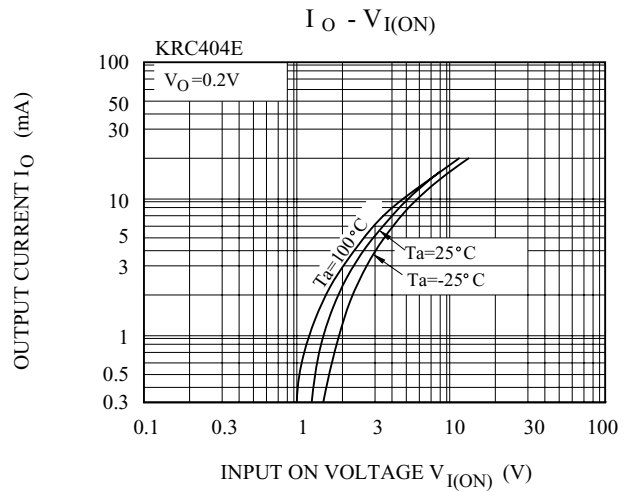
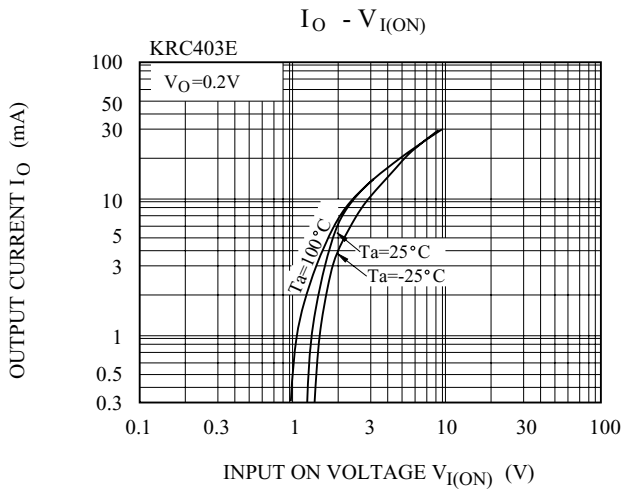
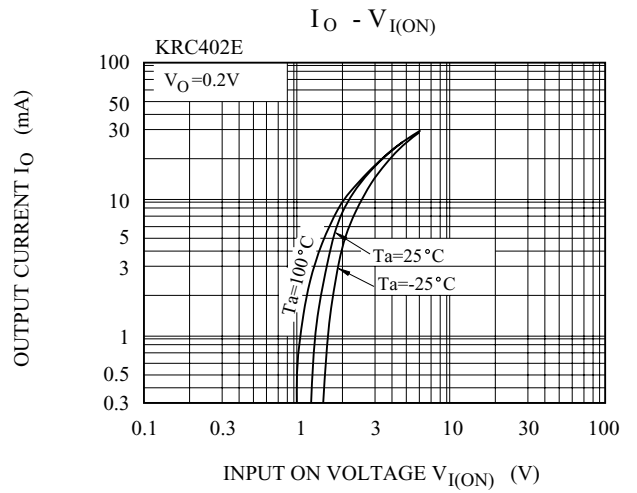
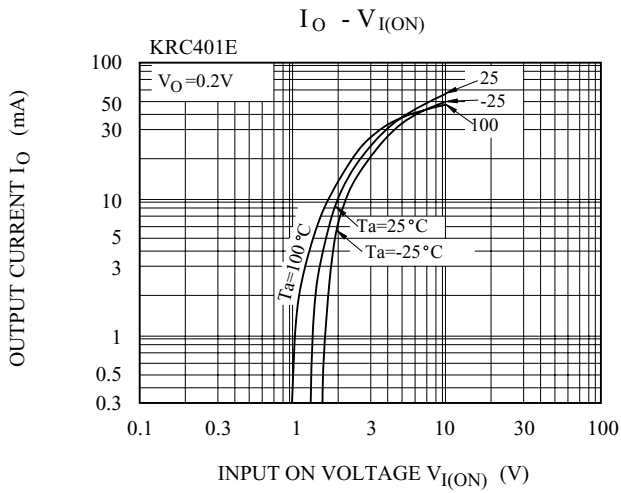
Note : \* Characteristic of Transistor Only.

# KRC401E~KRC406E

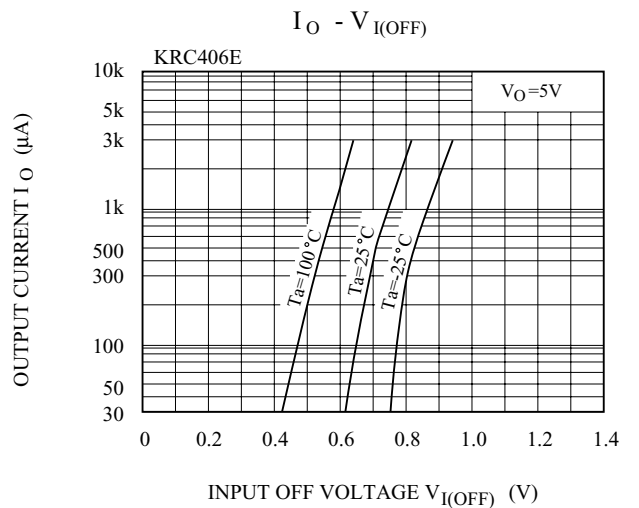
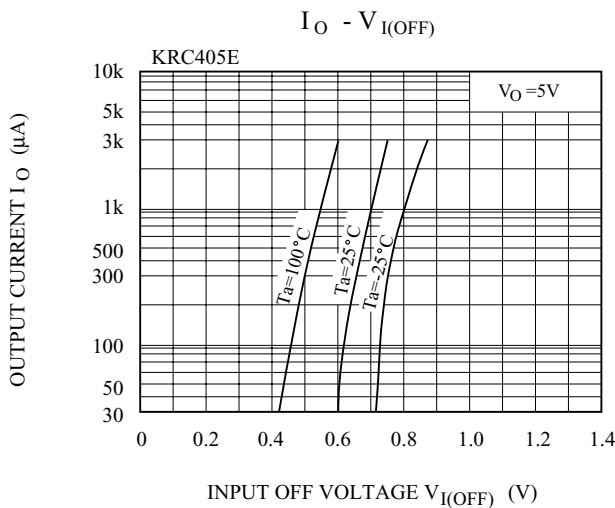
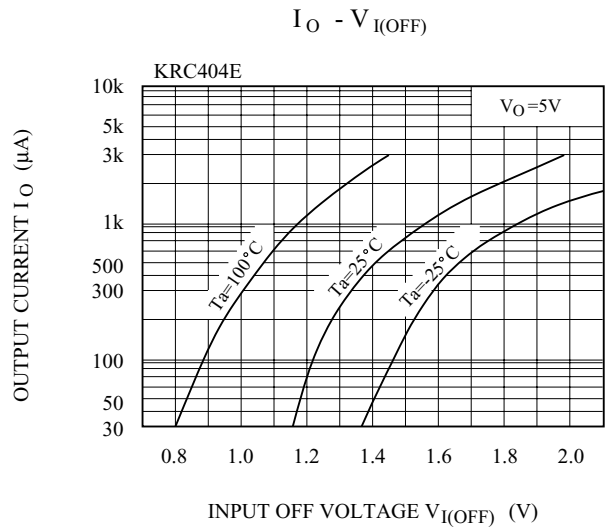
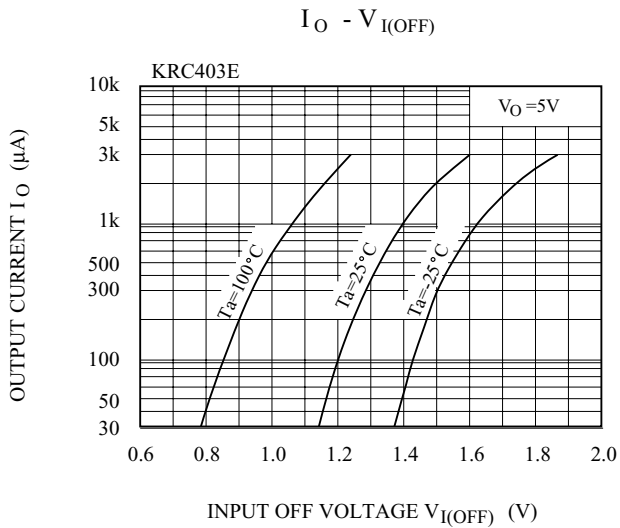
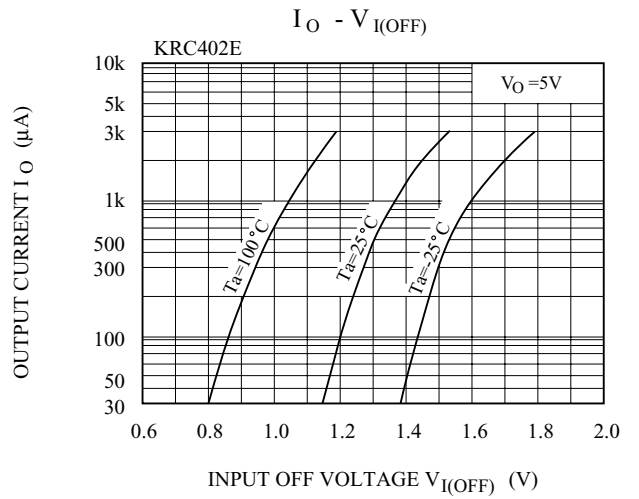
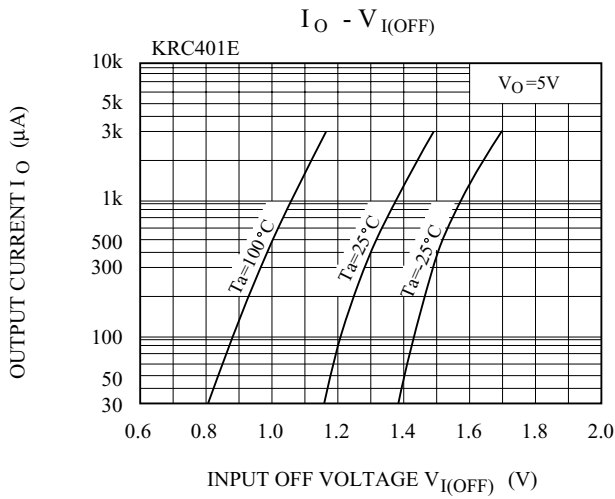
## ELECTRICAL CHARACTERISTICS (Ta=25 )

CHARACTERISTIC		SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Switching Time	Rise Time	KRC401E	V <sub>O</sub> =5V V <sub>IN</sub> =5V R <sub>L</sub> =1k	-	0.03	-	μs
		KRC402E		-	0.05	-	
		KRC403E		-	0.12	-	
		KRC404E		-	0.22	-	
		KRC405E		-	0.01	-	
		KRC406E		-	0.03	-	
	Storage Time	KRC401E		-	2.0	-	
		KRC402E		-	2.0	-	
		KRC403E		-	2.0	-	
		KRC404E		-	2.0	-	
		KRC405E		-	2.0	-	
		KRC406E		-	2.0	-	
	Fall Time	KRC401E		-	0.12	-	
		KRC402E		-	0.36	-	
		KRC403E		-	0.35	-	
		KRC404E		-	0.6	-	
		KRC405E		-	0.1	-	
		KRC406E		-	0.19	-	

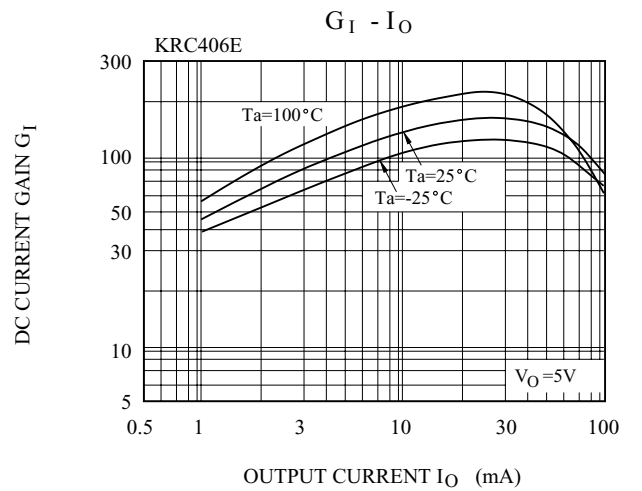
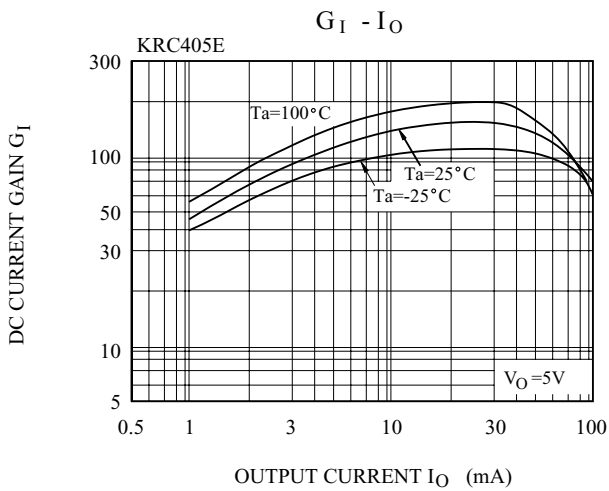
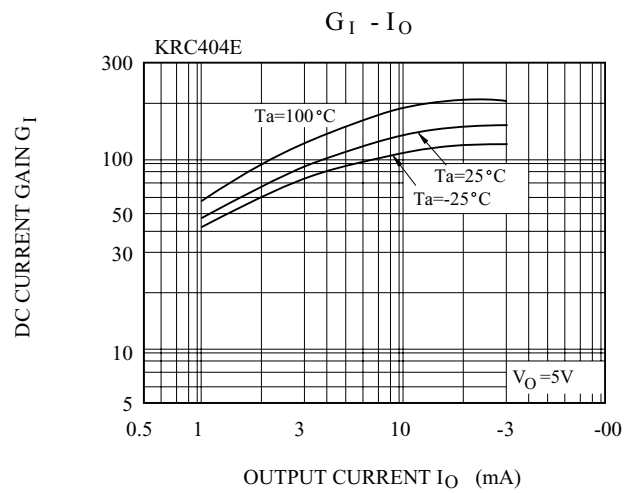
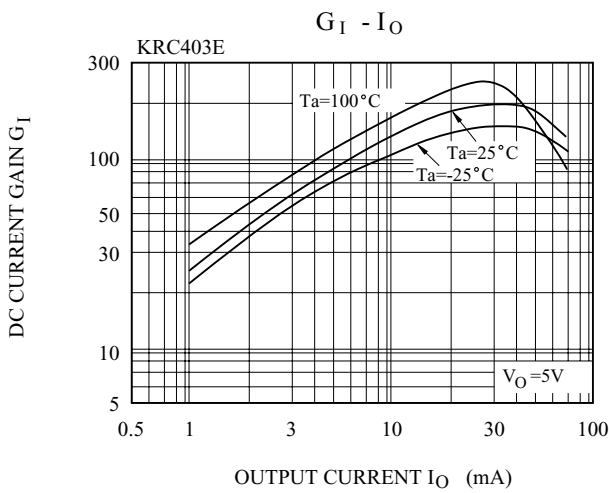
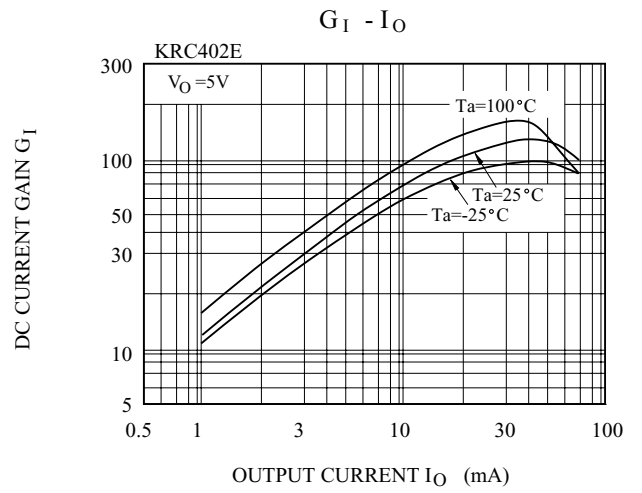
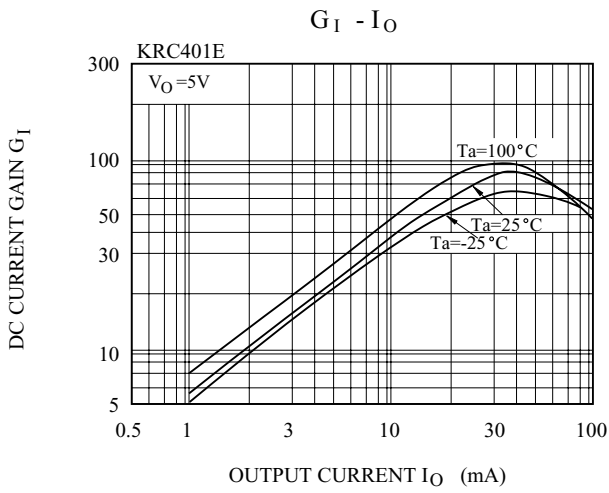
# KRC401E~KRC406E



# KRC401E~KRC406E



# KRC401E~KRC406E



# KRC401E~KRC406E

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