

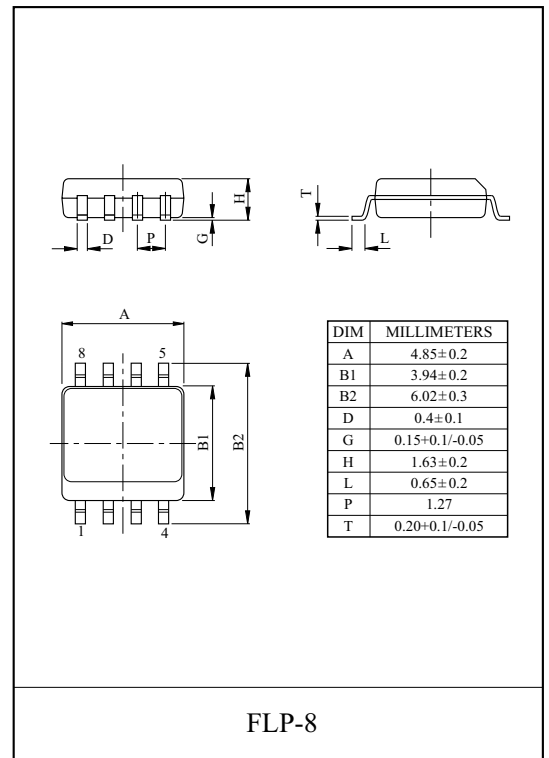
COMPLEX SHUNT REGULATOR

FEATURES

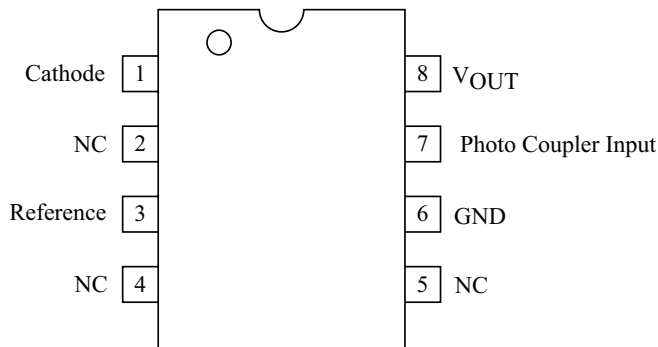
- Few External Componets. (Bulit-in Output fixed Resistor)
- Fixed Output Voltage of 3.40V, 5.05V, 5.15V, 5.20V, 5.25V.
- Sink Current Capability of 5mA to 100mA.
- Output Voltage Tolerance : $\pm 2\%$.
- Package Outline : FLP-8

MAXIMUM RATINGS (Ta=25 °C)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Cathode to Anode Voltage	V_{KA}	36	V
Cathode Current Range	I_K	-100~150	mA
Reference Input Current Range	I_{REF}	-0.05~10	mA
Power Dissipation	P_D	400	mW
Operating Junction Temperature	T_{opr}	-40~85	°C
Storage Temperature	T_{stg}	-65 ~150	°C



PIN CONNECTION (TOP VIEW)



LINE-UP

ITEM	OUTPUT VOLTAGE (Typ.)	PACKAGE
* KIA431340F	3.40	FLP-8
* KIA431505F	5.05	
* KIA431515F	5.15	
KIA431520F	5.20	
* KIA431525F	5.25	

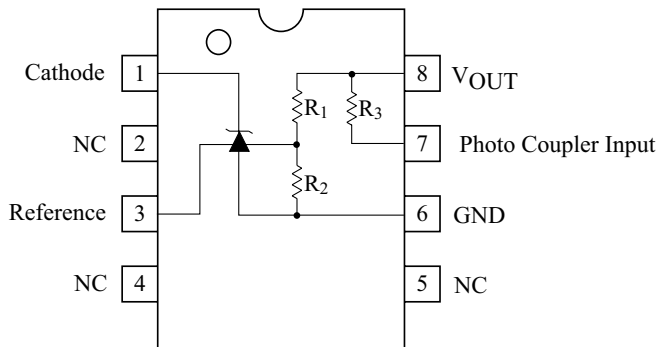
* Under Development.

KIA431340F~KIA431525F

ELECTRICAL CHARACTERISTICS (Ta=25 °C)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT	
Output Voltage	V_{OUT}	$I_K=5mA,$ $V_{KA}=V_{OUT}$	KIA431340F	3.332	3.40	3.468	V
			KIA431505F	4.949	5.05	5.151	
			KIA431515F	5.047	5.15	5.253	
			KIA431520F	5.096	5.20	5.304	
			KIA431525F	5.145	5.25	5.355	
Load Regulation	Reg Load	$I_{OUT}=5mA\sim 100mA$	-	-	300	mV	
Output Start Current	I_{START}	$V_{OUT}=Constant$	-	-	4	mA	
Reference Input Voltage	V_{REF}	$I_K=10mA, V_{KA}=V_{OUT}$	2.470	2.495	2.520	V	
Off-State Cathode Current	I_{OFF}	$V_{KA}=36V, V_{REF}=V_{OUT}=GND$	-	-	1500	nA	

Fig. 1 BLOCK DIAGRAM



ITEM	R_1 (k Ω)	R_2 (k Ω)	R_3 (k Ω)
KIA431340F	0.36	1.0	0.61
KIA431505F	1.03		
KIA431515F	1.07		
KIA431520F	1.09		
KIA431525F	1.11		

Fig. 2 APPLICATION CIRCUIT FOR STANDARD

