

NAME

System Regulator Type:

●Voltage Set Point :14.5V

● Regulation: B – Circuit

●Inactive Lamp

●Soft Start

Short Circuit Protection

● Backup of Phase Terminal

•Self Exciting Regulator

PARAMETERS AND CONDITIONS	SYMBOLS	MIN.	TYP.	MAX.	UNITS
Operating Temperature Range	T _{OP}	-30		125	${\mathbb C}$
Field	$\mathbf{I_F}$		5		A
Voltage Set Point (2500 RPM, at 20A load)	V_{SET}	14.30	14.50	14.70	V
Secondary Set Point (2500 RPM ,at 20A load)	$ m V_{SET2}$				V
Speed Regulation (2000 RPM to 6000 RPM ,at load = 15A)	$ m V_{SR}$		-0.1	-0.3	V
Load Regulation (10% to 95%, at Speed = 6000 RPM)	$ m V_{LR}$		-0.4	-0.5	V
Saturation Voltage @ 5A, 12Volts	V _{SAT}		0.4	0.5	V
Standby Current (Key off, V _{BAT} = 12.6V)	I_{SB}			2.0	mA
Temperature Coefficient	T_{C}	-6	-3	0	mV/ ℃
Over voltage Indication	V _{ov}	15.8	16.3	16.8	V
Under voltage Indication	$ m V_{UV}$	9.5	10.0	10.5	V
Soft-Start Duty	D _{SS}	15	30	45	%
LRC Delay Time	T_{LRC}				Sec
Cut-in Speed	R _{CIS}			1200	RPM

Safety Characteristics:

- ➤ Over voltage: Vs = 24 V, 60 sec. from the ignition SW. is turned ON/OFF without failure.
- ➤ Battery Reversal: Vs = -14 V, 60 sec. from accidental battery reversal without failure.
- > Short Circuit Protection: The regulator stands short circuit of Field and Lamp and Choke without failure.

> Repetitive Thermal Shock:

The Regulator shall be designed to withstand 500 cycles of -30'C to 125'C in 20 minutes and 125'C to -30'C in 20 minutes.

➤ High Temperature Test :

The Regulator shall be designed to operate reliability at the rated current of alternator is 80% to 100% and at 6000 rpm (shaft speed) for a minimum of 10 hours at 125'C.

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