

**Features**

- Epoxy Meets UL 94 V-0 Flammability Rating
- Halogen Free Available Upon Request By Adding Suffix "-HF"
- Lead Free Finish/RoHS Compliant(Note1) ("P" Suffix Designates RoHS Compliant. See ordering information)

**Maximum Ratings**

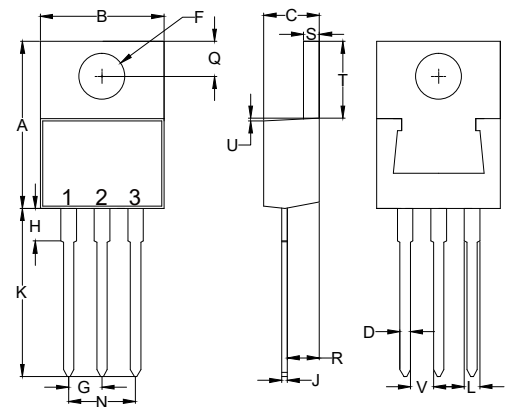
- Thermal Resistance: 83.3°C/W Junction to Air
- Thermal Resistance: 8.33°C/W Junction to Cases

Parameter	Symbol	Value	Unit
Input Voltage	$V_I$	-35	V
Output Current	$I_o$	1.5	A
Power Dissipation( $T_a=25\text{ }^\circ\text{C}$ )	$P_D$	1.5	W
Power Dissipation( $T_c=25\text{ }^\circ\text{C}$ )	$P_D$	15	W
Operating Junction Temperature( $I_o$ ) * ^	$T_{OPR}$	0~150	°C
Storage Temperature Range	$T_{STG}$	-55~150	°C

Notes:1.High Temperature Solder Exemption Applied, see EU Directive Annex 7a.

**Three-Terminal Positive Voltage Regulators**

TO-220



PIN 1. INPUT  
PIN 2. GND  
PIN 3. OUTPUT

DIMENSIONS

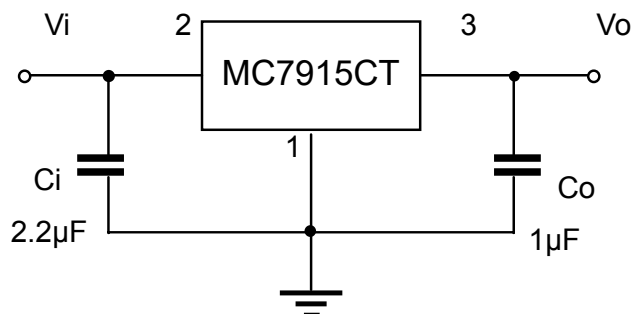
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.560	0.625	14.22	15.88	
B	0.380	0.420	9.65	10.67	
C	0.140	0.190	3.56	4.82	
D	0.020	0.045	0.51	1.14	
F	0.139	0.161	3.53	4.09	Φ
G	0.090	0.110	2.29	2.79	
H	-----	0.250	-----	6.35	
J	0.012	0.025	0.30	0.64	
K	0.500	0.580	12.70	14.73	
L	0.045	0.060	1.14	1.52	
N	0.190	0.210	4.83	5.33	
Q	0.100	0.135	2.54	3.43	
R	0.080	0.115	2.04	2.92	
S	0.045	0.055	1.14	1.39	
T	0.230	0.270	5.84	6.86	
U	-----	0.050	-----	1.27	
V	0.045	-----	1.15	-----	

**Electrical Characteristics**

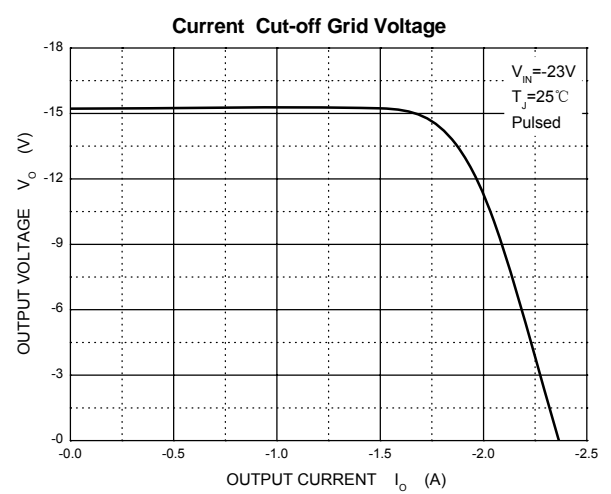
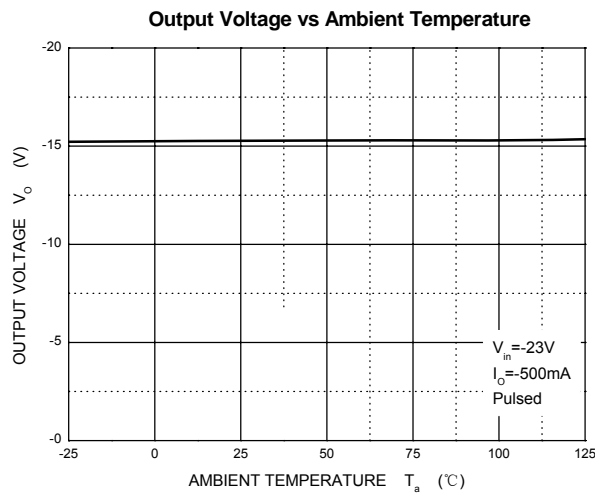
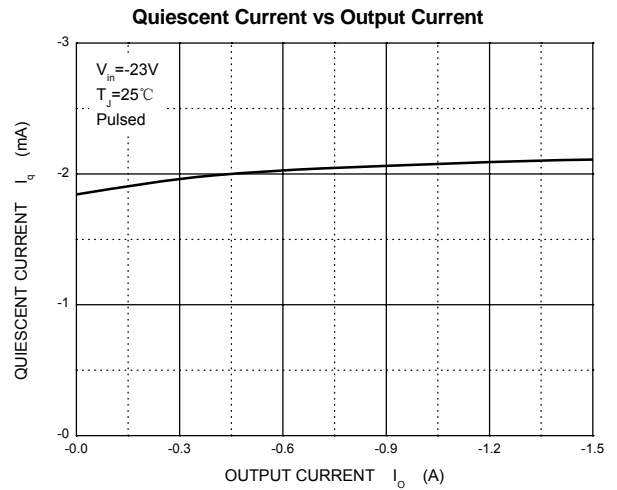
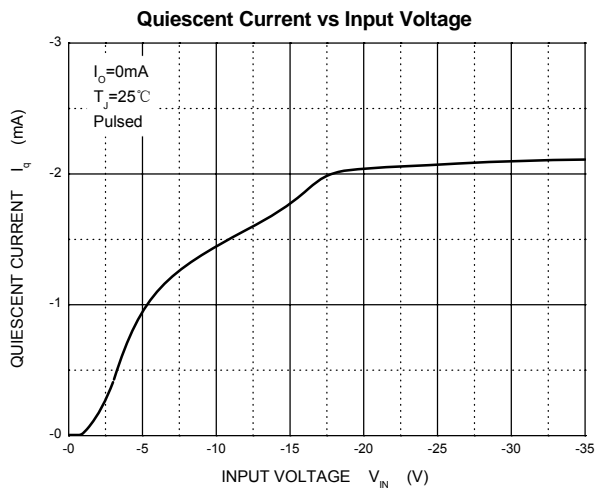
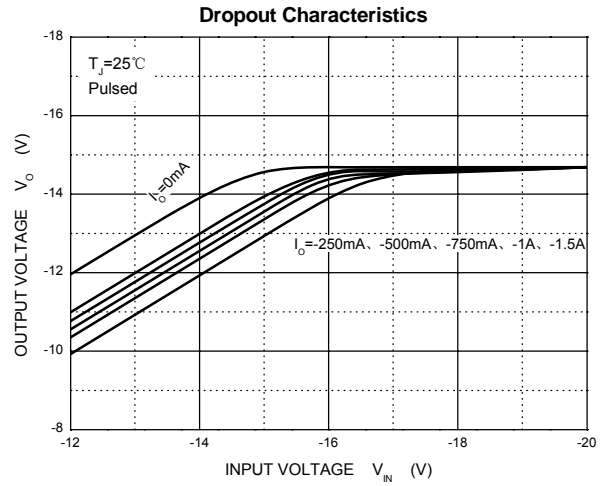
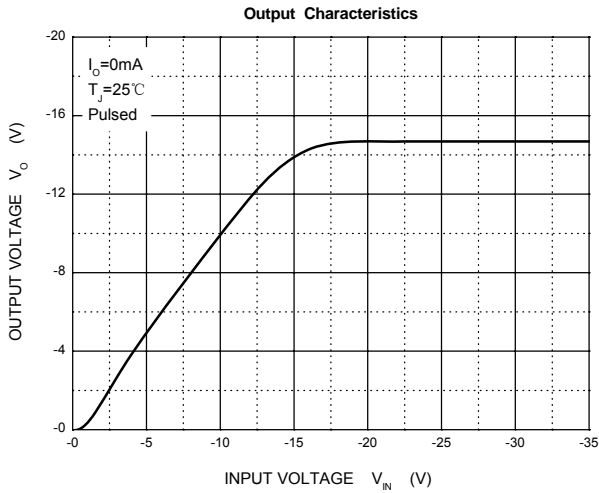
( $V_i = -23V$ ,  $I_o = 500mA$ ,  $0^\circ C < T_j < 125^\circ C$ ,  $C_i = 2.2\mu F$ ,  $C_o = 1\mu F$ , Unless Otherwise Specified)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Output Voltage	$V_o$	$T_j = 25^\circ C$	-14.4	-15.0	-15.6	V
		$-17.5V \leq V_i \leq -30V$ , $5mA \leq I_o \leq 1000mA$ , $P_D \leq 15W$ , $0 \sim 125^\circ C$	-14.25	-15.0	-15.75	V
Load Regulation	$\Delta V_o$	$5mA \leq I_o \leq 1500mA$ , $T_j = 25^\circ C$	-	15.0	200	mV
		$250mA \leq I_o \leq 750mA$ , $T_j = 25^\circ C$	-	5.0	75	mV
Line Regulation	$\Delta V_o$	$-17.5V \leq V_i \leq -30V$ , $T_j = 25^\circ C$	-	5.0	100	mV
		$-20V \leq V_i \leq -26V$ , $T_j = 25^\circ C$	-	3.0	50	mV
Quiescent Current	$I_q$		-	2.0	3.0	mA
Quiescent Current Change	$\Delta I_q$	$-17.5V \leq V_i \leq -30V$ , $0 \sim 125^\circ C$	-	-	0.5	mA
		$5mA \leq I_o \leq 1000mA$ , $0 \sim 125^\circ C$	-	-	0.5	mA
Output Noise Voltage	$V_N$	$10Hz \leq f \leq 100KHz$ , $T_j = 25^\circ C$	-	375	-	$\mu V$
Ripple Rejection	RR	$-18.5V \leq V_i \leq -28.5V$ , $f = 120Hz$ , $0 \sim 125^\circ C$	54	60	-	dB
Dropout Voltage	$V_d$	$T_j = 25^\circ C$ , $I_o = 1.0A$	-	1.1	-	V
Peak Output Current	$I_{pk}$	$T_j = 25^\circ C$	-	2.1	-	A
Output Voltage Drift	$\Delta V_o / \Delta T$	$0^\circ C \leq T_j \leq 125^\circ C$ , $I_o = 5.0mA$	-	-1	-	$mV/^\circ C$

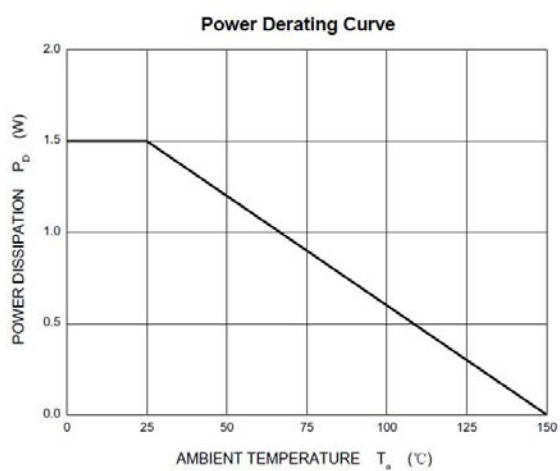
**Typical Application**



**Curve Characteristics**



## Curve Characteristics



## Ordering Information

Device	Packing
Part Number-BP	Bulk:50pcs/Tube,1Kpcs/Box,5Kpcs/Carton

Note : Adding "-HF" Suffix For Halogen Free, eg. Part Number-BP-HF

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