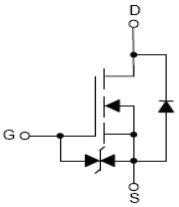
DATA SHEET

PPL3134K

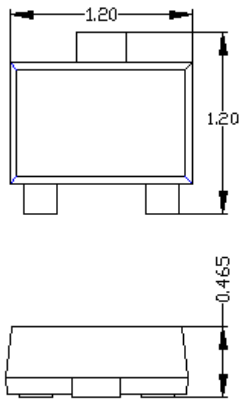
- ◇ Lead Free Product is Acquired
- ◇ Surface Mount Package
- ◇ N-Channel Switch with Low $R_{DS(on)}$
- ◇ Operated at Low Logic Level Gate Drive

Device Marking Code	
CJ3134K	KF

Circuit Diagram



SOT723



MAXIMUM RATINGS (Ta=25℃ unless otherwise noted)

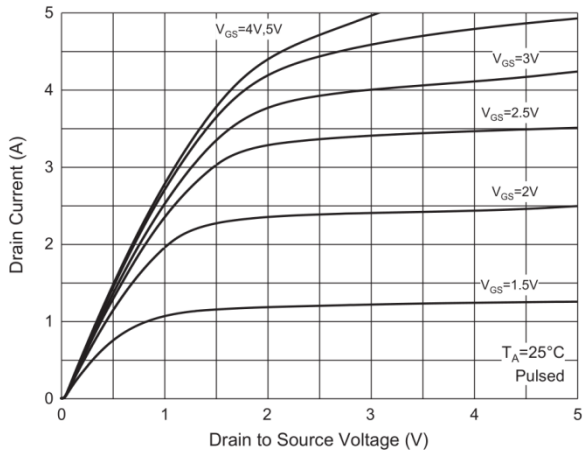
Symbol	Parameter	Value	Unit
V_{DS}	Drain-Source Voltage	20	V
V_{GS}	Gate-Source Voltage	±12	V
I_D	Drain Current-Continuous	0.75	A
I_{DM}	Pulsed Drain Current (t_p =10us)	1.8	A
P_D	Power Dissipation	0.15	W
$R_{\Theta JA}$	Thermal Resistance From Junction To Ambient	833	℃/W
Tj	Junction Temperature	150	℃
Tstg	Storage Temperature	-55～+150	℃

ELECTRICAL CHARACTERISTICS @ 25° C Unless Otherwise Specified

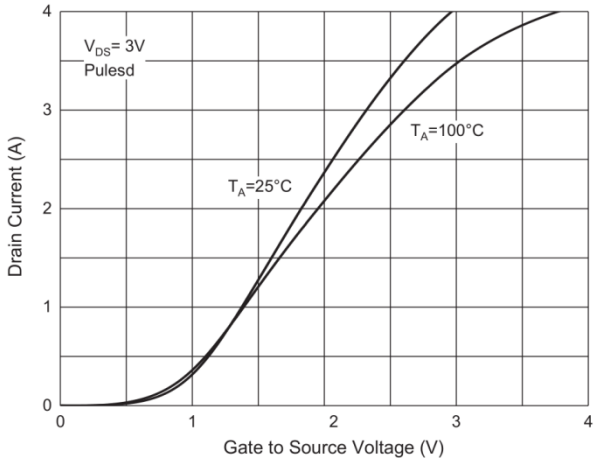
Symbol	Parameter	Test Conditions	Min	Typ	Max	Units
$V_{(BR)DSS}$	Drain-Source Breakdown Voltage	V_{GS}=0V, I_D=250μA	20			V
$V_{GS(th)}$	Gate-Threshold Voltage	V_{DS}=V_{GS}, I_D=250μA	0.35		1.1	V
I_{DSS}	Zero Gate Voltage Drain Current	V_{DS}=20V, V_{GS}=0V			1.0	uA
I_{GSS}	Gate-Body Leakage Current	V_{GS} =±10V, V_{DS}=0V			±20	uA
$R_{DS(on)}$	Drain-Source On-Resistance	V_{GS}=4.5V, I_D=0.65A			380	mΩ
		V_{GS}=2.5V, I_D=0.55A			450	mΩ
		V_{GS}=1.8V, I_D=0.45A			800	mΩ
g_{FS}	Forward transconductance	V_{DS} =10V, I_D =0.8A		1.6		S
V_{DS}	Diode forward voltage	I_D =0.15A, V_{GS}=0V			1.2	V
Dynamic Characteristics						

Ciss	Input Capacitance	V_{DS}=16V,V_{GS}=0V, f=1MHz		79	120	pF
Coss	Output Capacitance			13	30	
Crss	Reverse Transfer Capacitance			9	10	
Switching Characteristics						
td(on)	Turn-on Delay Time	V_{GS}=4.5V, V_{DS}=10V, I_D=500mA,R_{GEN}=10Ω		6.7		nS
tr	Turn-on rise Time			4.8		
td(off)	Turn-off Delay Time			17.3		
tr	Turn-off Fall Time			7.4		V

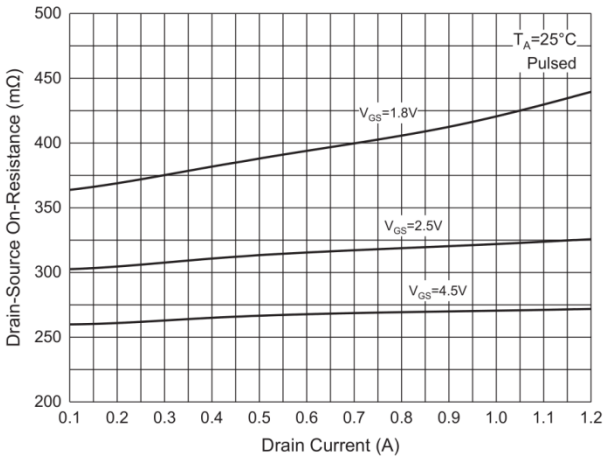
Characteristics Curve



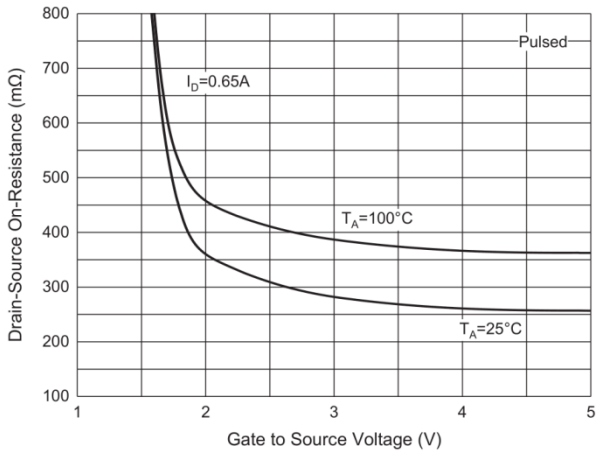
Output Characteristics



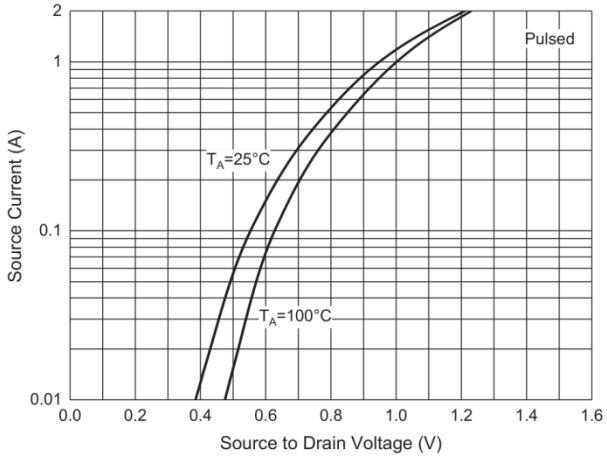
Transfer Characteristics



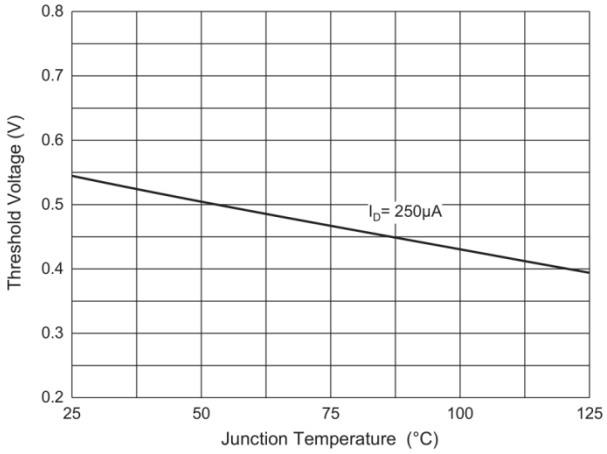
$R_{DS(ON)}$—I_D Characteristics



$R_{DS(ON)}$—V_{GS} Characteristics



I_S—V_{SD} Characteristics



Threshold Voltage Characteristics

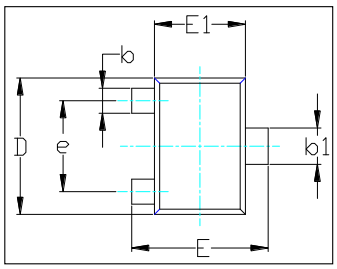
ORDERING INFORMATION

Device	Package	Shipping	Tape wide	Emboss pitch	Tape specification	Notes
CJ3134K	SOT723	Tape & Reel 8000pcs /7" Reel	8mm	4mm	Conductive	

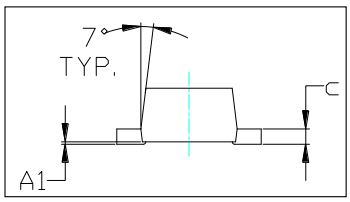
PACKAGE DIMENSIONS

Package outline : SOT723

Top view

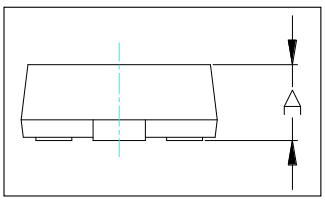


Side view

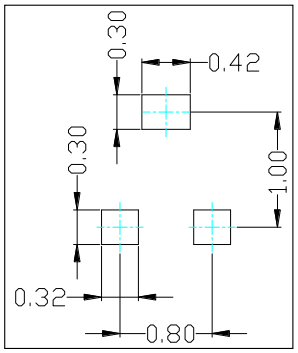


SYMBOL	DIMENSIONS IN MILLIMETER	
	MIN	MAX
A	0.430	0.500
A1	0.000	0.050
b	0.170	0.270
b1	0.270	0.370
c	0.080	0.150
D	1.150	1.250
E	1.150	1.250
E1	0.750	0.850
e	0.800 TYP.	
θ	0°	7°

Front view



Soldering Pattern



Notice:

1.Lead plating: Pb free solder
2.Lead thickness includes solder plating
3.Lead frame: CAC-5
4.Other Tolerance: ±0.05
5.Dimensions are exclusive of Burrs,Mold Flash and Tie Bar extrusions
6.Unit: mm