

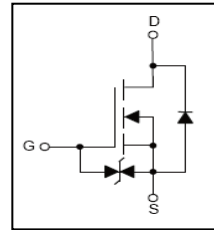
DATA SHEET

PPL3134KF7

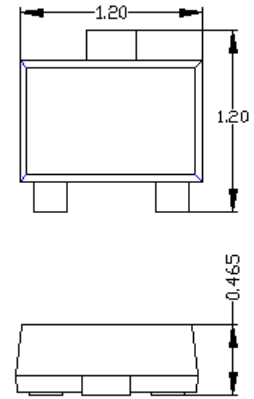
- ◇ Lead Free Product is Acquired
- ◇ Surface Mount Package
- ◇ N-Channel Switch with Low $R_{DS(on)}$
- ◇ Operated at Low Logic Level Gate Drive

Device Marking Code	
PPL3134KF7	KF

Circuit Diagram



SOT723



MAXIMUM RATINGS ($T_a=25^{\circ}\text{C}$ unless otherwise noted)

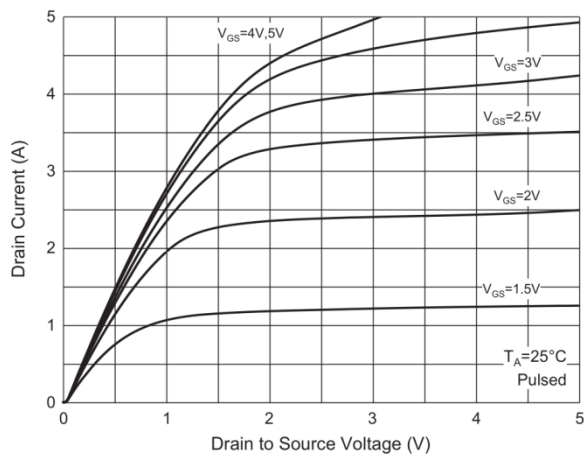
Symbol	Parameter	Value	Unit
V_{DS}	Drain-Source Voltage	20	V
V_{GS}	Gate-Source Voltage	± 12	V
I_D	Drain Current-Continuous	0.75	A
I_{DM}	Pulsed Drain Current ($t_p=10\mu\text{s}$)	1.8	A
P_D	Power Dissipation	0.15	W
$R_{\theta JA}$	Thermal Resistance From Junction To Ambient	833	$^{\circ}\text{C}/\text{W}$
T_j	Junction Temperature	150	$^{\circ}\text{C}$
T_{stg}	Storage Temperature	$-55 \sim +150$	$^{\circ}\text{C}$

ELECTRICAL CHARACTERISTICS @ 25°C Unless Otherwise Specified

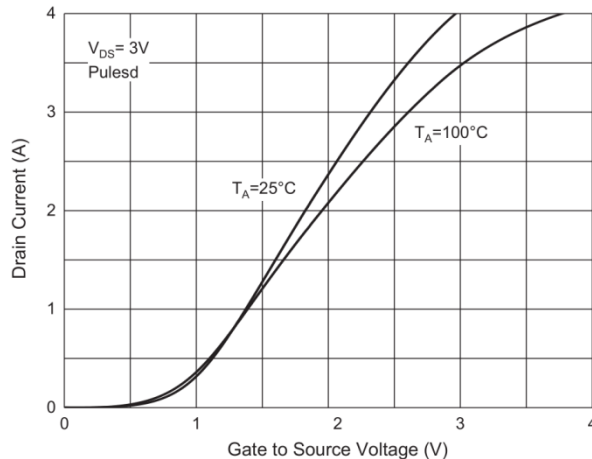
Symbol	Parameter	Test Conditions	Min	Typ	Max	Units
$V_{(BR)DSS}$	Drain-Source Breakdown Voltage	$V_{GS}=0\text{V}, I_D=250\mu\text{A}$	20			V
$V_{GS(th)}$	Gate-Threshold Voltage	$V_{DS}=V_{GS}, I_D=250\mu\text{A}$	0.35		1.1	V
I_{DSS}	Zero Gate Voltage Drain Current	$V_{DS}=20\text{V}, V_{GS}=0\text{V}$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

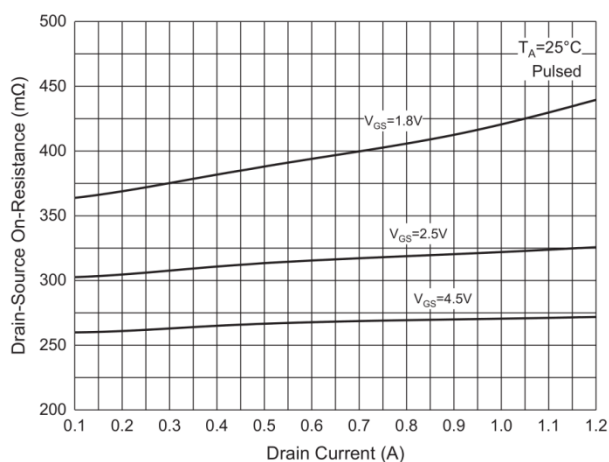
Characteristics Curve



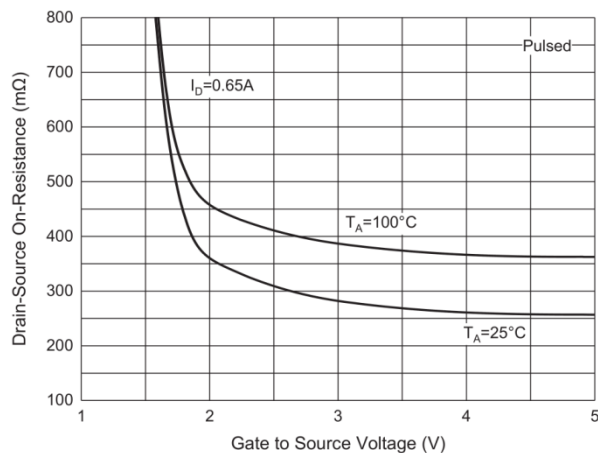
Output Characteristics



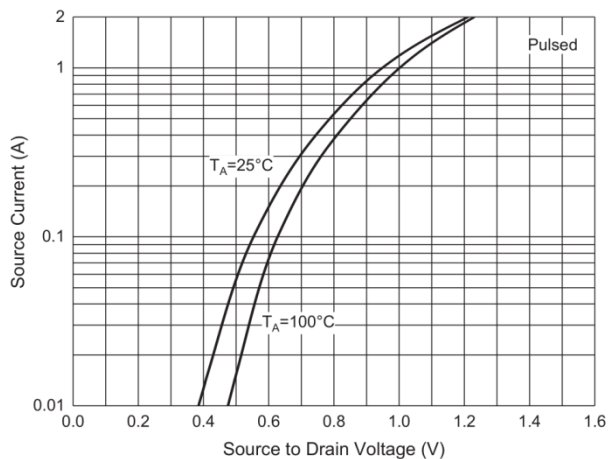
Transfer Characteristics



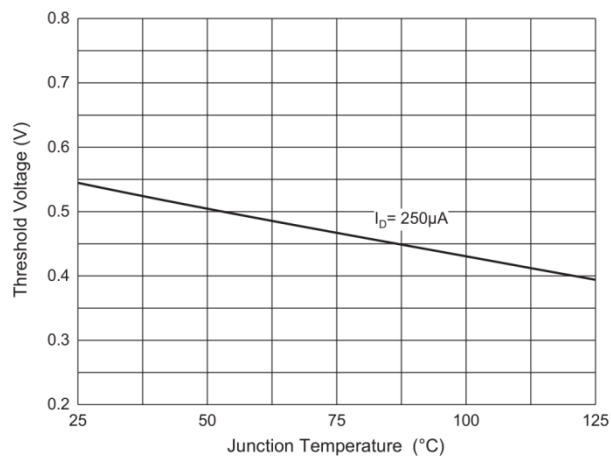
$R_{DS(ON)}-I_D$ Characteristics



$R_{DS(ON)}-V_{GS}$ Characteristics



I_S-V_{SD} Characteristics

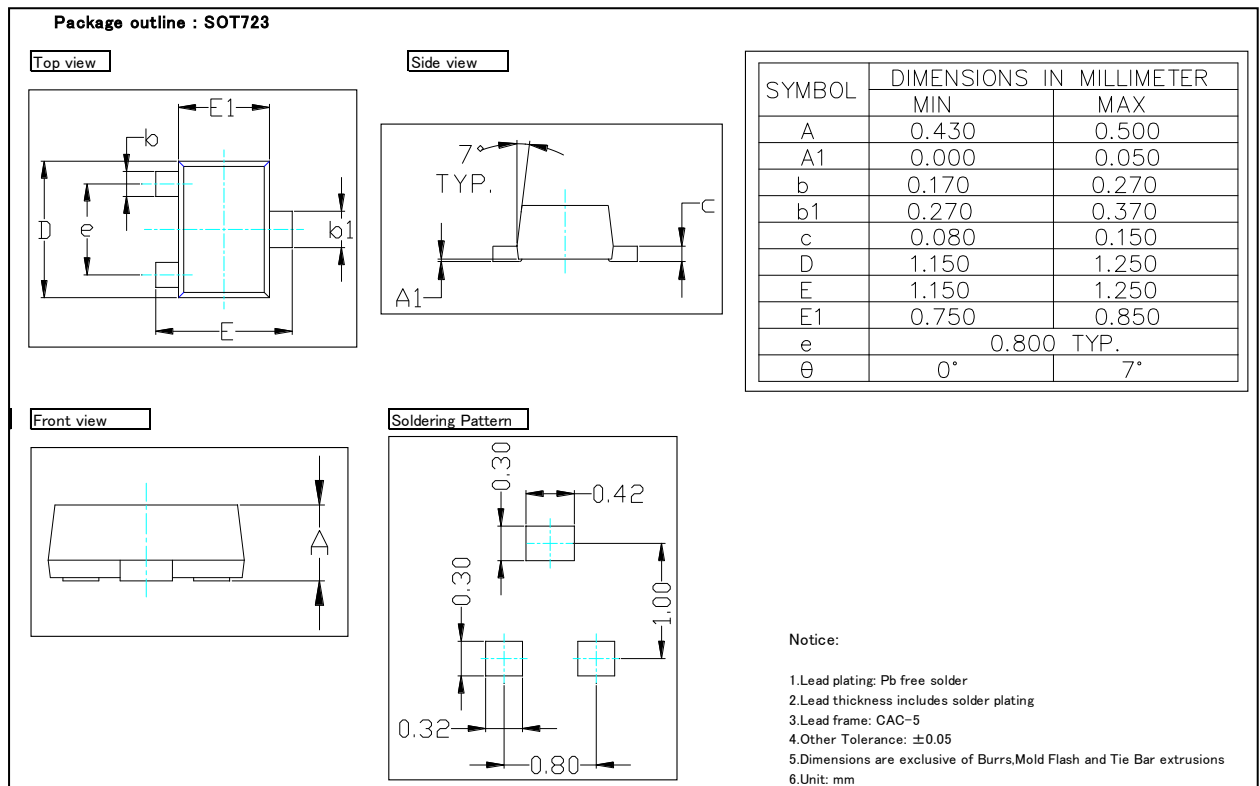


Threshold Voltage Characteristics

ORDERING INFORMATION

Device	Package	Shipping	Tape wide	Emboss pitch	Tape specification	Notes
PPL3134KF7	SOT723	Tape & Reel 8000pcs /7" Reel	8mm	4mm	Conductive	

PACKAGE DIMENSIONS



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