

**Feature**

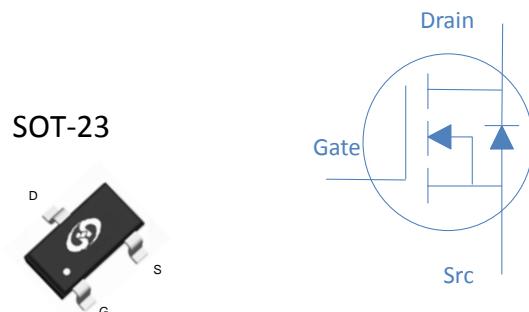
High Speed Power Switching, Logic Level  
Enhanced Avalanche Ruggedness  
100% UIS Tested, 100% Rg Tested  
Lead Free, Halogen Free

$V_{DS}$	20	V
$R_{DS(on),typ}$	$V_{GS}=4.5V$	36 mΩ
$R_{DS(on),typ}$	$V_{GS}=2.5V$	43 mΩ
$R_{DS(on),typ}$	$V_{GS}=1.8V$	58 mΩ
$I_D$ (Silicon Limited)	3.6	A

**Application**

Hard Switching and High Speed Circuit  
DC/DC in Telecoms and Industrial

	Package	
	SOT23	1Y


**Absolute Maximum Ratings at  $T_J$** 

	Symbol	Conditions	Value	Unit
$I_D$	$T_A$		3.6	A
	$T_A$		2.9	
$V_{DS}$	-		20	V
$V_{GS}$	-		$\pm 12$	V
$I_{DM}$	-		14	A
$P_D$	$T_A$		1.04	
$T_J, T_{stg}$	-		-55 to 150	

**Absolute Maximum Ratings**

	Symbol	Max	Unit
	$R_{\theta JA}$	120	

J

Symbol	Conditions	Value			Unit
		min	typ	max	
V	$V_{GS}=0V, I_D=250\mu A$	20	-	-	V
V	$V_{GS}=V_{DS}, I_D=250\mu A$	0.40	0.75	1.2	
$I_{DSS}$	$V_{GS}=0V, V_{DS}=16V, T_j$	-	-	1	
	$V_{GS}=0V, V_{DS}=16V, T_j$	-	-	10	$\mu A$
$I_{GSS}$	$V_{GS}=\pm 12V, V_{DS}=0V$	-	-	$\pm 100$	nA
	$V_{GS}=4.5V, I_D=3.5A$	-	36	45	
$R_{DS(on)}$	$V_{GS}=2.5V, I_D=2A$	-	43	60	$m\Omega$
	$V_{GS}=1.8V, I_D=1A$	-	58	85	
g	$V_{DS}=5V, I_D=3.5A$	-	5	-	S

Input Capacitance

 $C_{iss}$  -

Output Capacitance

 $V_{GS}=0V, V_{DS}$  56 -

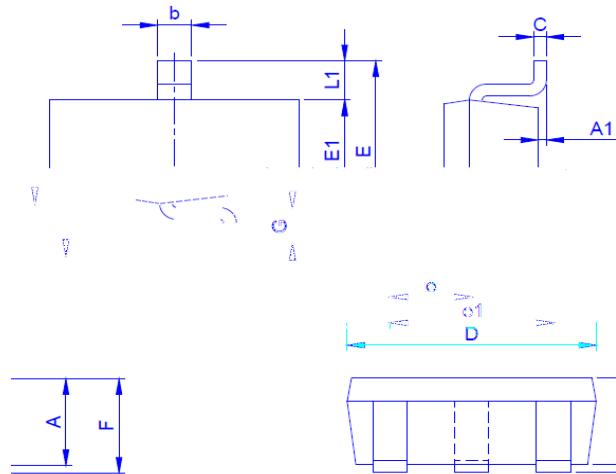
C

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 $V_{DD}=10V, I_D=3.5A, V_{GS}=4.5V$  $Q_{gd}$






**Package Outline**
**SOT-23, 3leads**

**Dimension in mm**

Dimension	A	A1	b	c	D	E	E1	e	e1	F	G	L1
Min.	0.70	0	0.3	0.08	2.80	2.25	1.2	0.90		0.80	0.3	0.50
Tvn.					2.90			0.95	1.9			