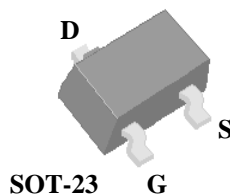
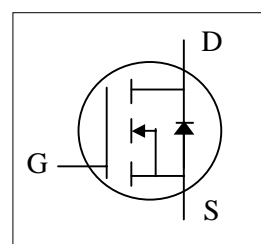


AP2332GN-HF

- ▼ Simple Drive Requirement
- ▼ Small Package Outline
- ▼ Surface Mount Device
- ▼ Halogen Free & RoHS Compliant Product



BV_{DSS}	600V
$R_{DS(ON)}$	300 Ω
I_D	27mA



Description

Advanced Power MOSFETs utilized advanced processing techniques to achieve the lowest possible on-resistance, extremely efficient and cost-effectiveness device.

The SOT-23 package is widely used for commercial-industrial applications.

Absolute Maximum Ratings

Symbol	Parameter	Rating	Units
V_{DS}	Drain-Source Voltage	600	V
V_{GS}	Gate-Source Voltage	± 20	V
$I_D@T_A=25^\circ\text{C}$	Continuous Drain Current ³ , V_{GS} @ 10V	27	mA
$I_D@T_A=70^\circ\text{C}$	Continuous Drain Current ³ , V_{GS} @ 10V	21	mA
I_{DM}	Pulsed Drain Current ¹	100	mA
$P_D@T_A=25^\circ\text{C}$	Total Power Dissipation	0.5	W
T_{STG}	Storage Temperature Range	-55 to 150	$^\circ\text{C}$
T_J	Operating Junction Temperature Range	-55 to 150	$^\circ\text{C}$

Thermal Data

Symbol	Parameter	Value	Unit
R_{thj-a}	Maximum Thermal Resistance, Junction-ambient ³	250	$^\circ\text{C}/\text{W}$

AP2332GN-HF

Electrical Characteristics @ $T_j=25^{\circ}\text{C}$ (unless otherwise specified)

Symbol	Parameter	Test Conditions	Min.	Typ.	Max.	Units
BV_{DSS}	Drain-Source Breakdown Voltage	$V_{GS}=0V, I_D=250\mu A$	600	-	-	V
$R_{DS(ON)}$	Static Drain-Source On-Resistance ²	$V_{GS}=10V, I_D=16mA$	-	-	300	Ω
$V_{GS(th)}$	Gate Threshold Voltage	$V_{DS}=V_{GS}, I_D=250\mu A$	2	-	5	V
g_{fs}	Forward Transconductance	$V_{DS}=10V, I_D=16mA$	-	28	-	mS
I_{DSS}	Drain-Source Leakage Current	$V_{DS}=480V, V_{GS}=0V$	-	-	25	μA
I_{GSS}	Gate-Source Leakage	$V_{GS}=\pm 20V, V_{DS}=0V$	-	-	± 100	nA
Q_g	Total Gate Charge ²	$I_D=0.1A$	1.8	2.5	3.2	nC
Q_{gs}	Gate-Source Charge	$V_{DS}=200V$	-	1.3	-	nC
Q_{gd}	Gate-Drain ("Miller") Charge	$V_{GS}=10V$	-	0.8	-	nC
$t_{d(on)}$	Turn-on Delay Time ²	$V_{DS}=300V$	-	11.5	-	ns
t_r	Rise Time	$I_D=10mA$	-	14.5	-	ns
$t_{d(off)}$	Turn-off Delay Time	$R_G=3.3\Omega, V_{GS}=10V$	-	14	-	ns
t_f	Fall Time	$R_D=30k\Omega$	-	120	-	ns
C_{iss}	Input Capacitance	$V_{GS}=0V$	8.8	12.5	16.2	pF
C_{oss}	Output Capacitance	$V_{DS}=25V$	7	10	13	pF
C_{riss}	Reverse Transfer Capacitance	$f=1.0MHz$	5	7	9	pF

Source-Drain Diode

Symbol	Parameter	Test Conditions	Min.	Typ.	Max.	Units
V_{SD}	Forward On Voltage ²	$I_S=0.05A, V_{GS}=0V$	-	-	1.5	V

Notes:

1. Pulse width limited by Max. junction temperature.
2. Pulse test
3. Mounted on min. copper pad.