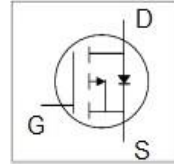
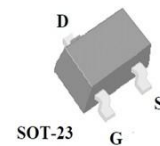


»Features

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



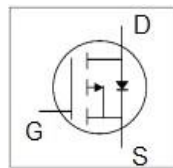
BV_{DSS}	-30V
$R_{DS(ON)typ}$	48m Ω
I_D	-4.1



»Description

CT3407M is from Coretong innovated design and silicon process technology to achieve the lowest possible on- resistance and fast switching performance. It provides the designer with an extreme efficient device for use in a wide range of

»Schematic & PIN Configuration



SOT-23

»Absolute Maximum Ratings@ $T_j=25^{\circ}\text{C}$ (unless otherwise specified)

Symbol	Parameter	Rating	Units
V_{DS}	Drain-Source Voltage	-30	V
V_{GS}	Gate-Source Voltage	± 20	V
$I_D@T_A=25^{\circ}\text{C}$	Drain Current, $V_{GS} @ 10V_1$	-4.1	A
$I_D@T_A=70^{\circ}\text{C}$	Drain Current, $V_{GS} @ 10V_1$	-3.2	A
I_{DM}	Pulsed Drain Current $_2$	-15	A
$P_D@T_A=25^{\circ}\text{C}$	Total Power Dissipation $_3$	0.3	W
T_{STG}	Storage Temperature Range	-55 to 150	$^{\circ}\text{C}$
T_J	Operating Junction Temperature Range	150	$^{\circ}\text{C}$

»Thermal Data

Symbol	Parameter	Value	Unit
R_{thj-a}	Maximum Thermal Resistance, Junction-ambient $_3$	100	$^{\circ}\text{C}/\text{W}$

»Electrical Characteristics@T_j=25 °C(unless otherwise specified)

Symbol	Parameter	Test Conditions	Min.	Typ.	Max.	Units
BV _{DSS}	Drain-Source Breakdown Voltage	VGS=0V, ID=250uA	-30	-	-	V
RDS(ON)	Static Drain-Source On-Resistance	VGS=10V, ID=-4.1A	-	48	65	mΩ
		VGS=-4.5V, ID=-3A	-	60	95	mΩ
V _{GS(th)}	Gate Threshold Voltage	VDS=VGS, ID=250uA	-1	-	-3	V
g _{fs}	Forward Transconductance	VDS=5V, ID=-4A	5.5	-	-	S
I _{DSS}	Drain-Source Leakage Current	VDS=24V, VGS=0V	-	-	-1	uA
I _{GSS}	Gate-Source Leakage	VGS=±20V, VDS=0V	-	-	±100	nA
t _{d(on)}	Turn-on Delay Time	VDS=-16V ID=1A RG=6Ω VGS=-4.5V	-	8.5	-	ns
t _r	Rise Time		-	4.5	-	ns
t _{d(off)}	Turn-off Delay Time		-	26	-	ns
t _f	Fall Time		-	12.5	-	ns
C _{iss}	Input Capacitance	VGS=0V	-	700	-	pF
C _{oss}	Output Capacitance	VDS=-6V	-	120	-	pF
Crss	Reverse Transfer Capacitance	f=1.0MHz	-	75	-	pF

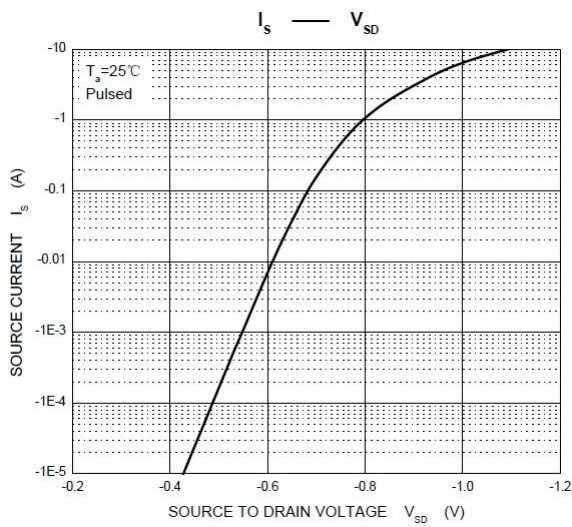
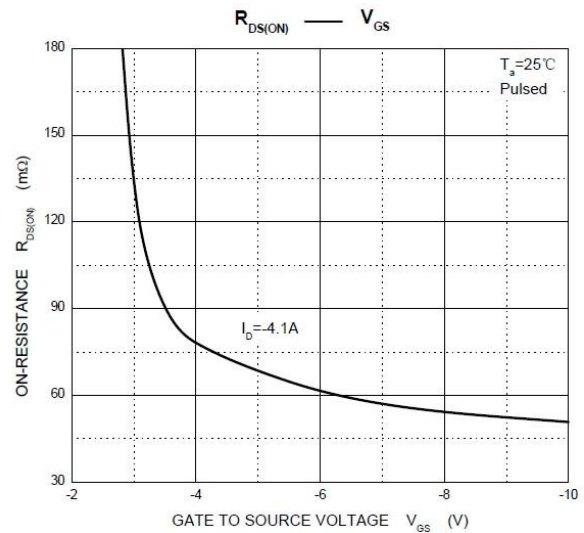
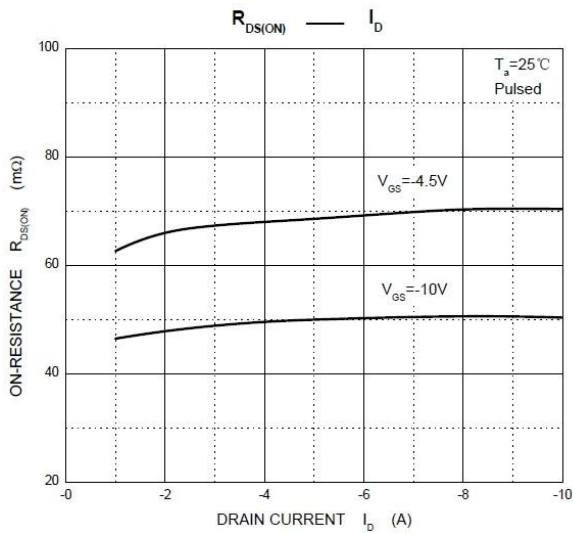
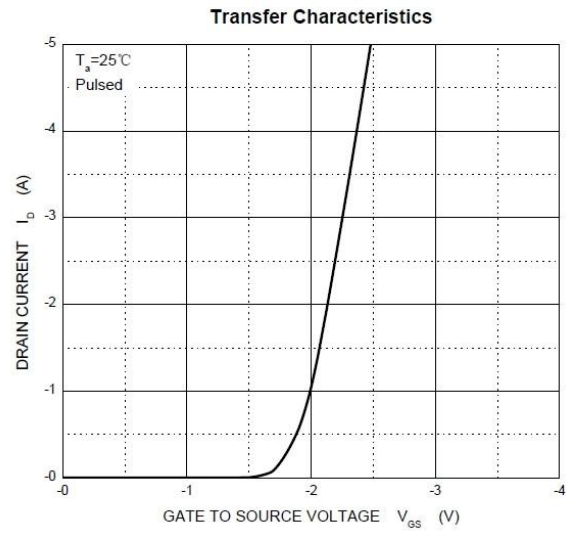
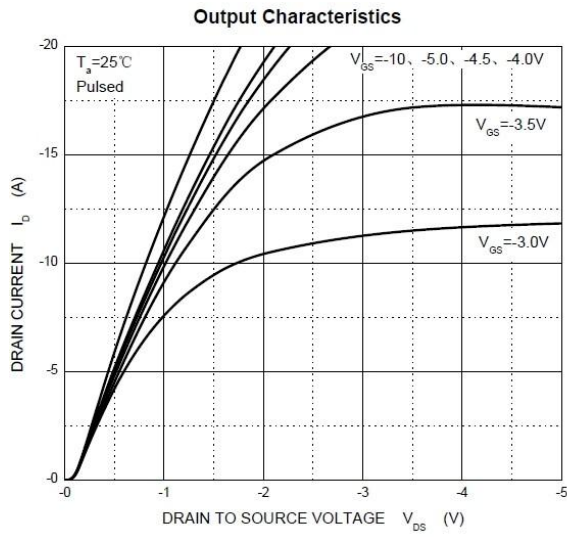
»Source-Drain Diode

Symbol	Parameter	Test Conditions	Min.	Typ.	Max.	Units
V _{SD}	Forward On Voltage ²	IS=1A, VGS=0V	-	-	-1.2	V

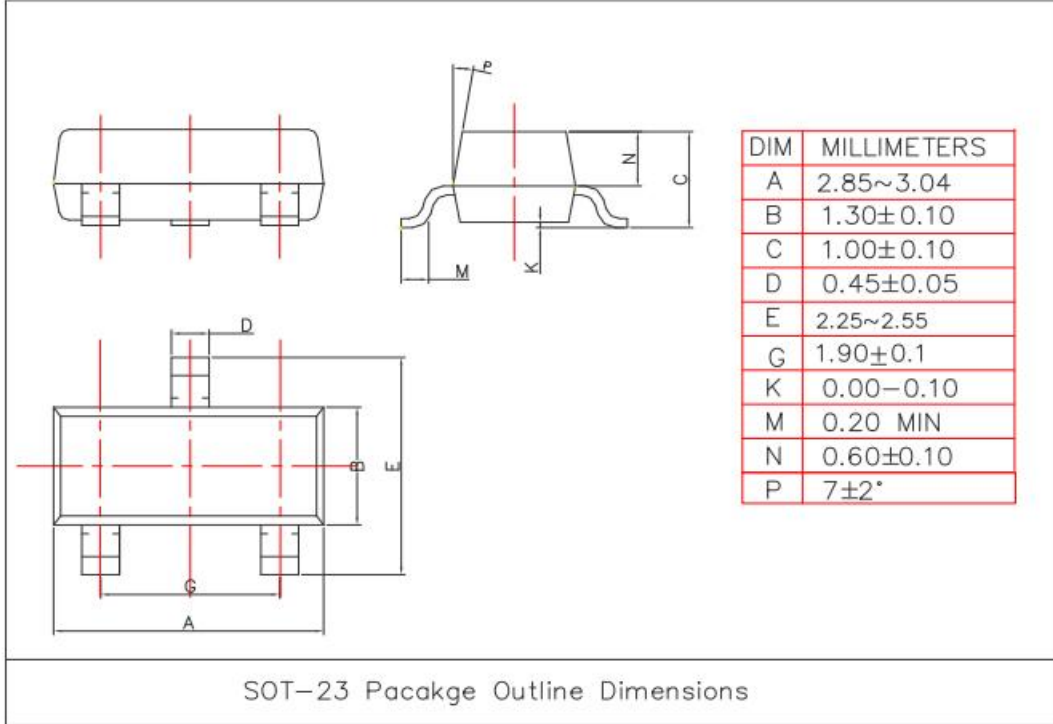
Notes:

- 1.Pulse width limited by Max. junction temperature.
- 2.Pulse test
- 3.Surface mounted on 1 in² 2oz copper pad of FR4 board, t ≤10sec ; 300°C/W when mounted on min. copper pad.

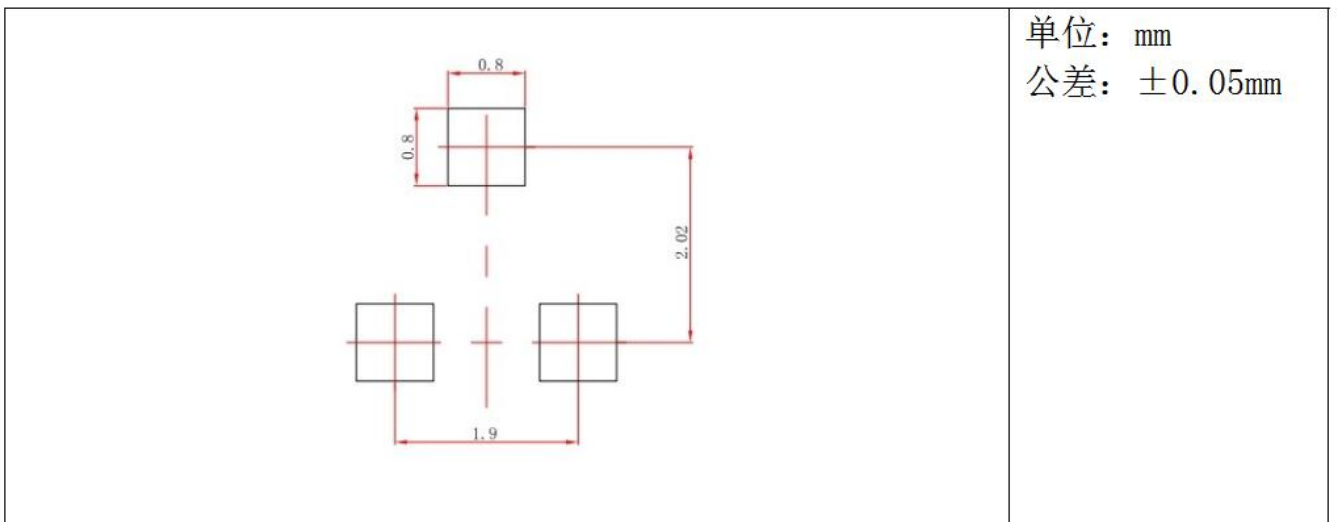
» Typical Performance Characteristics



»Package Outline : SOT-23



»SOT-23 FOOTPRINT:(mm)



»Ordering information

Order code	Package	Base qty	Delivery mode
CT3407M	SOT-23	3k	Tape and reel