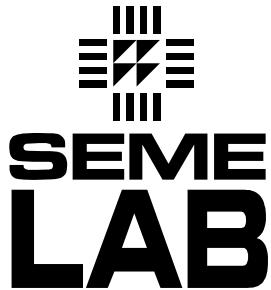


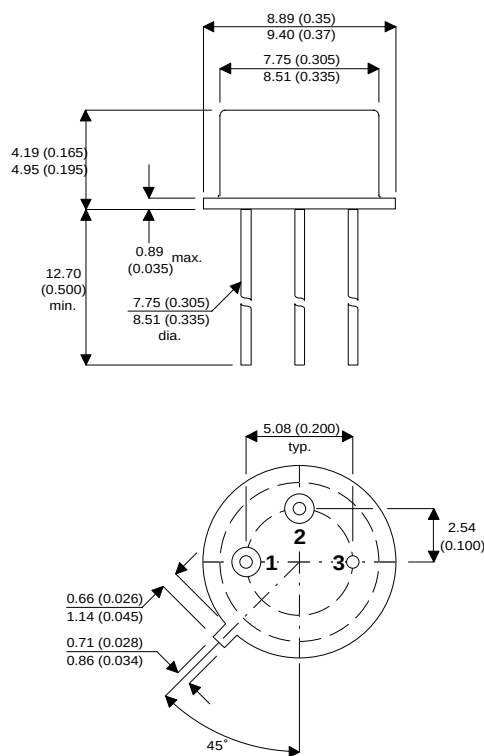
این دیتاشیت توسط توکل الکترونیک تهیه و ارائه شده است.
جهت مشاهده قیمت، موجودی و ثبت سفارش این قطعه به وبسایت توکل الکترونیک مراجعه فرمایید.

**مشاهده قیمت و خرید**

برای خرید و مشاهده سایر محصولات کلیک کنید

**2N6782****MECHANICAL DATA**

Dimensions in mm (inches)

**TO39**

Pin 1 - Source

Pin 2 - Gate

Pin 3 Drain and Case

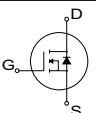
**N-CHANNEL
POWER MOSFET****APPLICATIONS**

- FAST SWITCHING
- MOTOR CONTROLS
- POWER SUPPLIES

ABSOLUTE MAXIMUM RATINGS ($T_{case} = 25^{\circ}C$ unless otherwise stated)

V_{DS}	Drain Source Voltage	100V
V_{GR}	Drain Gate Voltage ($R_{GS} = 1M\Omega$)	100V
$I_D @ T_{case} = 25^{\circ}C$	Continuous Drain Current	$\pm 3.5V$
$I_D @ T_{case} = 100^{\circ}C$	Continuous Drain Current	$\pm 2.25A$
I_{DM}	Pulsed Drain Current ¹	$\pm 8V$
V_{GS}	Gate Source Voltage	$\pm 40V$
$P_D @ T_{case} = 25^{\circ}C$	Maximum Power Dissipation	15W
$P_D @ T_{case} = 100^{\circ}C$	Maximum Power Dissipation	6W
Junction to Case	Linear Derating Factor	$0.12W/^{\circ}C$
Junction to ambient	Linear Derating Factor	$0.005W/^{\circ}C$
T_J, T_{stg}	Operating and Storage Temperature Range	-55 to $+150^{\circ}C$
Lead Temperature	(1/16" from case for 10 secs)	$300^{\circ}C$

ELECTRICAL CHARACTERISTICS ($T_{case} = 25^{\circ}C$ unless otherwise stated)

Parameter		Test Conditions		Min.	Typ.	Max.	Unit
STATIC ELECTRICAL RATINGS							
BV _{DSS}	Drain – Source Breakdown Voltage	V _{GS} = 0	I _D = 0.25mA	100*			V
V _{GS(th)}	Gate Threshold Voltage	V _{DS} = V _{GS}	I _D = 0.5A	2*		4.0*	V
			T _A = 125°C	1*		4.0*	
I _{GSSF}	Gate Body Leakage Forward	V _{GS} = 20V	I _D = 0.5A			100*	nA
			T _A = 125°C			200*	
I _{GSSR}	Gate Body Leakage Reverse	V _{GS} = -20V				-100*	
I _{DSS}	Zero Gate Voltage Drain Current	V _{DS} = 0.8 Max.	Ratings V _{GS} =0			0.25*	mA
		V _{DS} = Max.	Ratings V _{GS} =0			1*	
			T _C = 125°C				
I _{D(on)}	On State Drain Current1	V _{DS} ≥ 2V _{DS(ON)}	V _{GS} = 10V	3.5			A
V _{DS(on)}	Static Drain Source On-State Voltage1	V _{GS} = 10V	I _D = 3.5A	2.1*			V
R _{DS(on)}	Static Drain Source On-State Resistance1	V _{GS} = 10V	I _D = 2.25A			0.6*	Ω
			T _C = 125°C			1.08*	
DYNAMIC CHARACTERISTICS							
g _{fs}	Forward Transductance 1	V _{DS} ≥ 2V _{DS(ON)}	I _{DS} = 2.25A	1.0*		3.0*	S (∩)
C _{iss}	Input Capacitance	V _{GS} = 0 f = 1MHz	V _{DS} = 25V	60*		200*	pF
C _{oss}	Output Capacitance			40*		100*	
C _{rss}	Reverse Transfer Capacitance			10*		25*	
t _{d(on)}	Turn–On Delay Time	V _{DD} = 34V	I _D = 2.25A			15*	ns
t _r	Rise Time	R _G = 25Ω	R _L = 15Ω			25*	
t _{d(off)}	Turn–Off Delay Time	(MOSFET switching times are essentially				25*	
t _f	Fall Time	independent of operating temperature.)				20*	
BODY– DRAIN DIODE RATINGS & CHARACTERISTICS							
I _S	Continuous Source Current Body Diode	Modified MOS POWER symbol showing the intergal  P-N junction rectifier.				-3.5*	A
I _{SM}	Source Current1 (Body Diode)					-8	A
V _{SD}	Diode Forward Voltage 1	I _S = -3.5A T _C = 25°C	V _{GS} = 0	-0.75*		-1.5*	V
t _{rr}	Reverse Recovery Time	I _F =I _S d _i / d _t = 100A/μs	T _J = 150°C		200		V
THERMAL CHARACTERISTICS							
R _{θJC}	Thermal Resistance Junction – Case	Free Air Operation				8.33*	°C\W
R _{θJPC}	Thermal Resistance Junction – PC Board					170	

Notes

1) Pulse Test: Pulse Width $\leq 300\mu s$, $\delta \leq 2\%$

* JEDEC registered Values