NEC

COMPOUND FIELD EFFECT POWER TRANSISTOR

μPA1523

P-CHANNEL POWER MOS FET ARRAY
SWITCHING TYPE

DESCRIPTION

The μPA1523 is P-channel Power MOS FET Array that built in 4 circuits designed for solenoid, motor and lamp driver.

FEATURES

- 4 V driving is possible
- Large Current and Low On-state Resistance
  $I_{D(pulse)}$ = ∓8 A
  $R_{DS(on)}$ ≦ 0.8 Ω MAX. (V_{GS} = −10 V)
  $R_{DS(on)}$ ≦ 1.3 Ω MAX. (V_{GS} = −4 V)
- 2.54 mm Pitch (0.1 inch)

ORDERING INFORMATION

Part Number	Package	Quality Grade
μPA1523H	10-Pin SIP	Standard

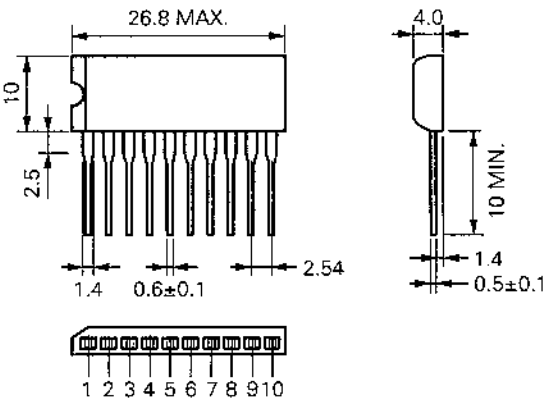
Please refer to "Quality grade on NEC Semiconductor Devices" (Document number IEI-1209) published by NEC Corporation to know the specification of quality grade on the devices and its recommended applications.

ABSOLUTE MAXIMUM RATINGS (T_a = 25 °C)

Drain to Source Voltage	V_{DSS}	−60	V
Gate to Source Voltage	$V_{GSS(AC)}$	∓20	V
Drain Current (DC)	$I_{D(DC)}$	∓2.0	A/unit
Drain Current (pulse)	$I_{D(pulse)}$*	∓8.0	A/unit
Total Power Dissipation (4 circuits)			
<T_c = 25 °C>	P_{T1}	28	W
Total Power Dissipation (4 circuits)			
<T_a = 25 °C>	P_{T2}	3.5	W
Channel Temperature	T_{ch}	150	°C
Storage Temperature	T_{stg}	−55 to +150	°C

* PW ≦ 300 μs, Duty Cycle ≦ 10 %

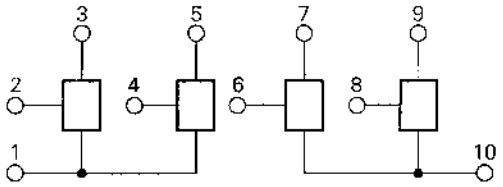
PACKAGE DIMENSIONS
(in millimeters)

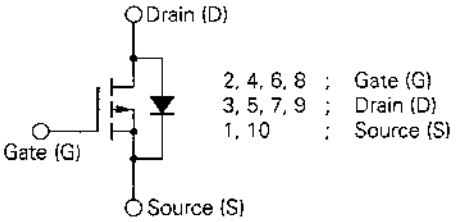


ELECTRODE CONNECTION

2, 4, 6, 8	GATE
3, 5, 7, 9	DRAIN
1, 10	SOURCE

PIN CONNECTION





Document No. IC-3330
Date Published December 1993 M
Printed in Japan