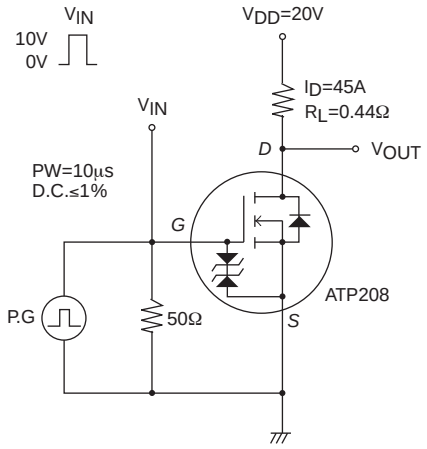
Electrical Characteristics at Ta=25°C

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Drain-to-Source Breakdown Voltage	$V_{(BR)DSS}$	I_D=1mA, V_{GS}=0V	40			V
Zero-Gate Voltage Drain Current	I_{DSS}	V_{DS}=40V, V_{GS}=0V			1	μA
Gate-to-Source Leakage Current	I_{GSS}	V_{GS}=±16V, V_{DS}=0V			±10	μA
Cutoff Voltage	V_{GS}(off)	V_{DS}=10V, I_D=1mA	1.5		2.6	V
Forward Transfer Admittance	| yfs |	V_{DS}=10V, I_D=45A	16	28		S
Static Drain-to-Source On-State Resistance	R_{DS}(on)1	I_D=45A, V_{GS}=10V		4.6	6.0	mΩ
	R_{DS}(on)2	I_D=23A, V_{GS}=4.5V		7	9.8	mΩ
Input Capacitance	Ciss	V_{DS}=20V, f=1MHz		4510		pF
Output Capacitance	Coss			535		pF
Reverse Transfer Capacitance	Crss			385		pF
Turn-ON Delay Time	t_d(on)	See specified Test Circuit.		35		ns
Rise Time	t_r			400		ns
Turn-OFF Delay Time	t_d(off)			280		ns
Fall Time	t_f			200		ns
Total Gate Charge	Qg	V_{DS}=20V, V_{GS}=10V, I_D=90A		83		nC
Gate-to-Source Charge	Qgs			19		nC
Gate-to-Drain “Miller” Charge	Qgd			17		nC
Diode Forward Voltage	V_{SD}	I_S=90A, V_{GS}=0V		1.0	1.2	V

Switching Time Test Circuit



Ordering Information

Device	Package	Shipping	memo
ATP208-TL-H	ATPAK	3,000pcs./reel	Pb Free and Halogen Free

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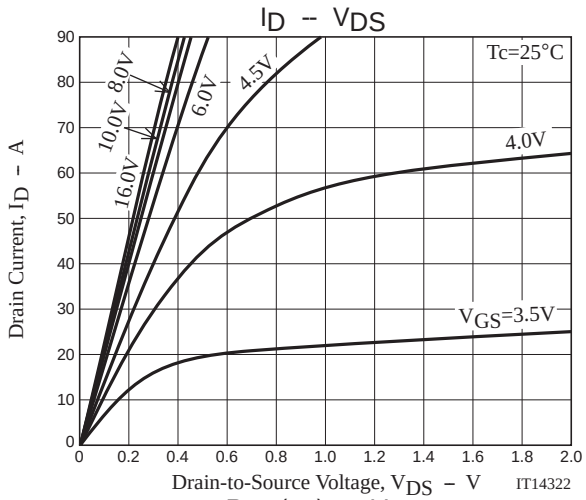

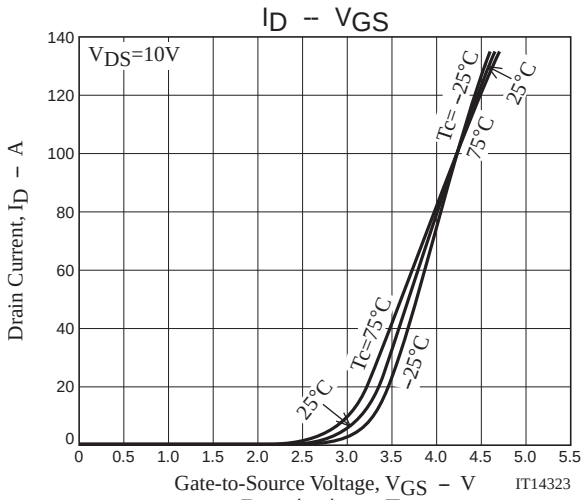

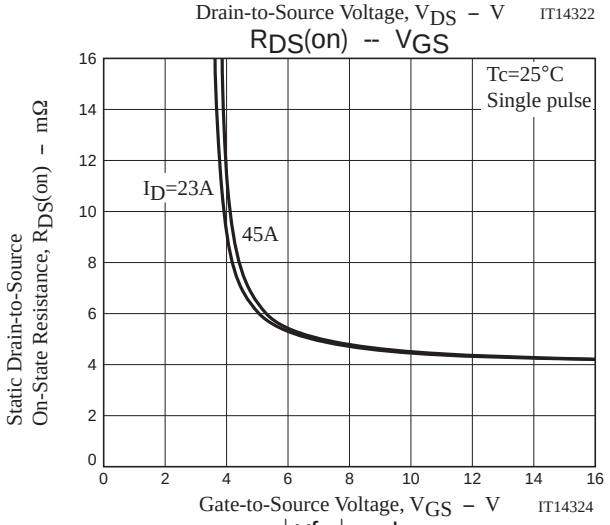

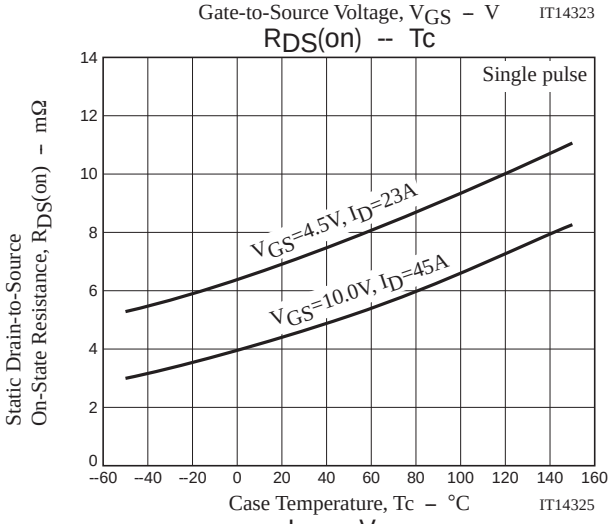

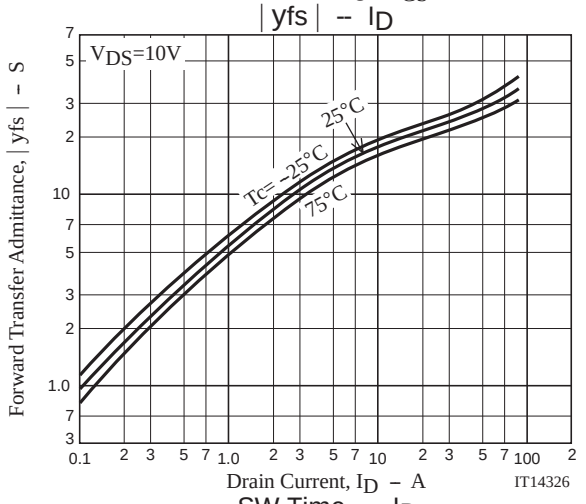

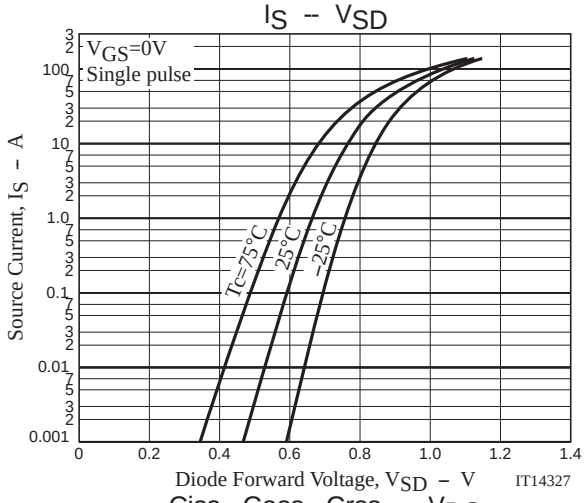

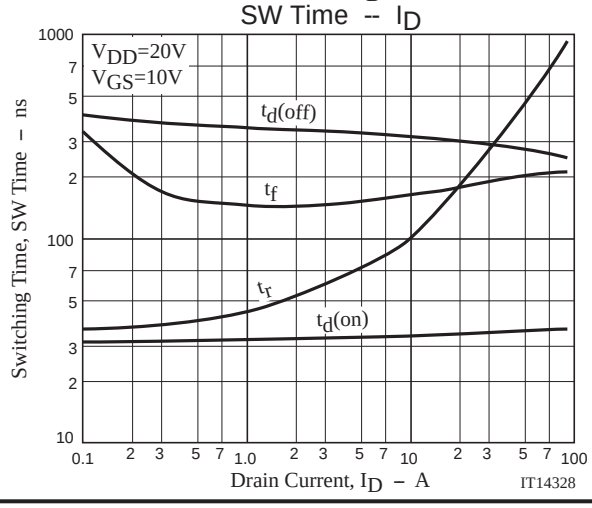

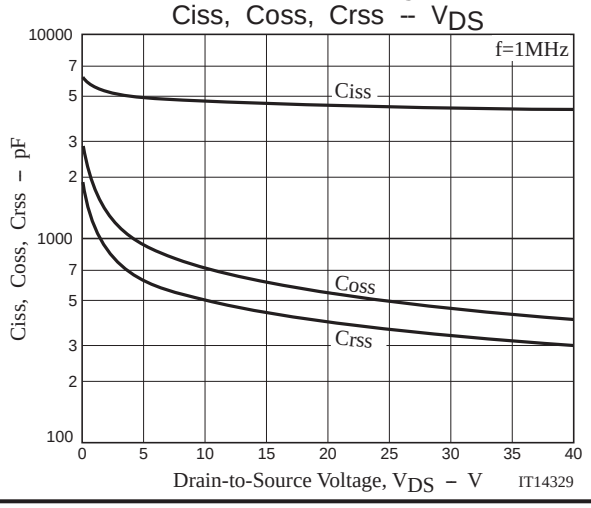

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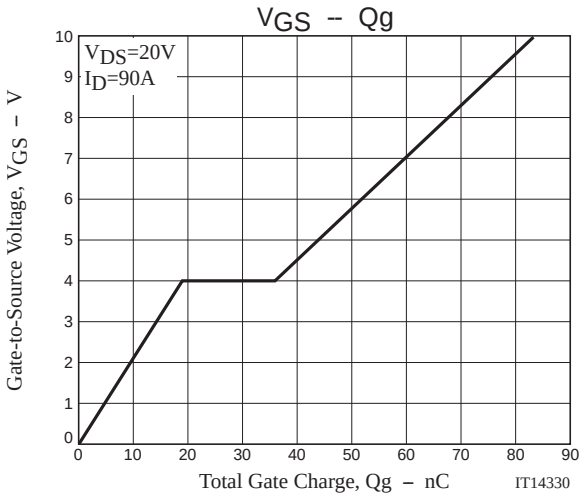

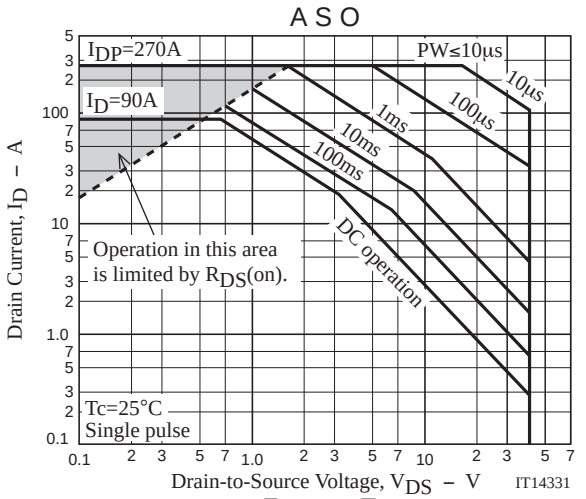

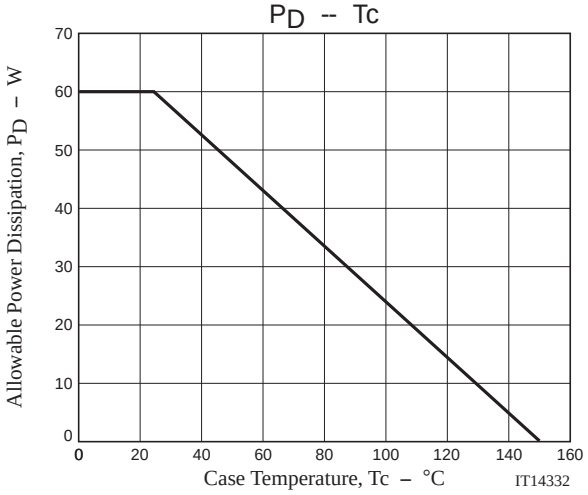

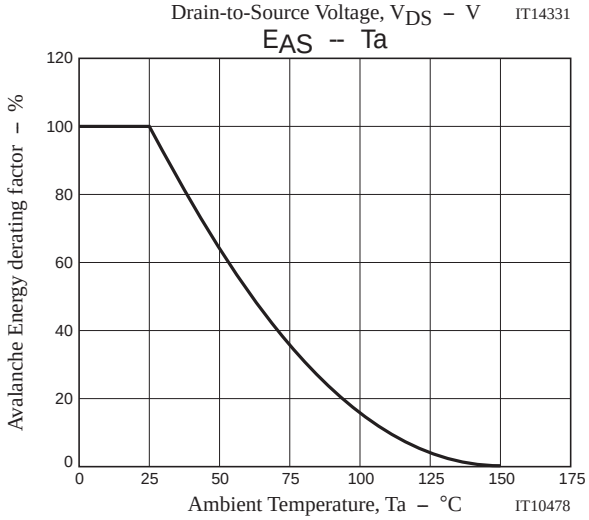

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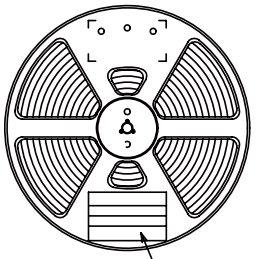
Taping Specification

ATP208-TL-H

1. Packing Format (TL)

Package Name	Carrier Tape Type	Maximum Number of devices contained (pcs)			Packing format	
		Reel	Inner box	Outer box	INNER BOX SD-C-18	OUTER BOX SD-A-18
ATPAK	ATP	3,000	3,000	15,000	1 reels contained Dimensions:mm (external) 340×340×28	5 inner boxes contained Dimensions:mm (external) 355×355×165

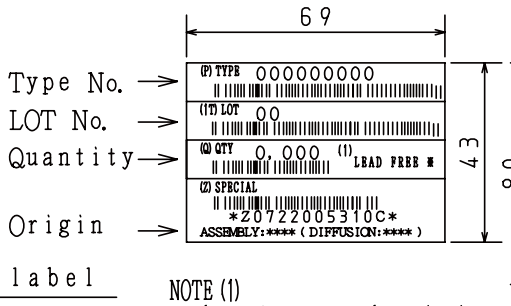
Packing method



Reel label

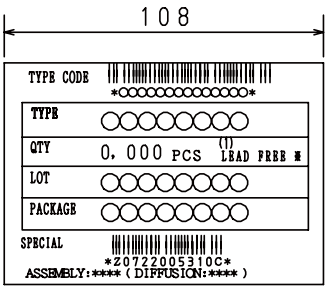
Reel label, Inner box label

(unit:mm)



Outer box label

It is a label at the time of factory shipments. The form of a label may change in physical distribution process.



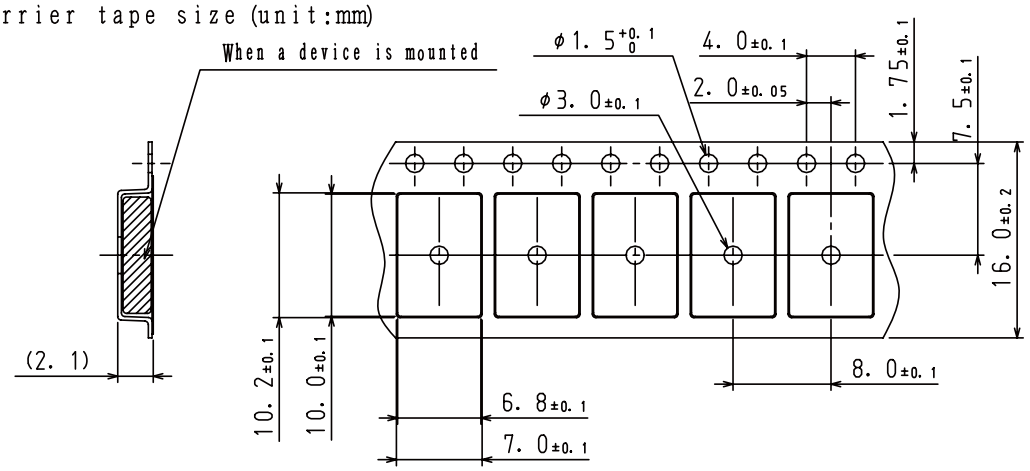
NOTE (1)

The LEAD FREE ※ description shows that the surface treatment of the terminal is lead free.

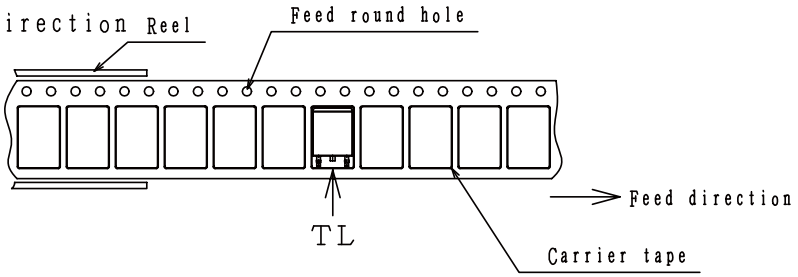
Label	JEITA Phase
LEAD FREE 3	JEITA Phase 3A
LEAD FREE 4	JEITA Phase 3

2. Taping configuration

2-1. Carrier tape size (unit:mm)



2-2. Device placement direction



The one erectrode terminals on feed hole side····TL

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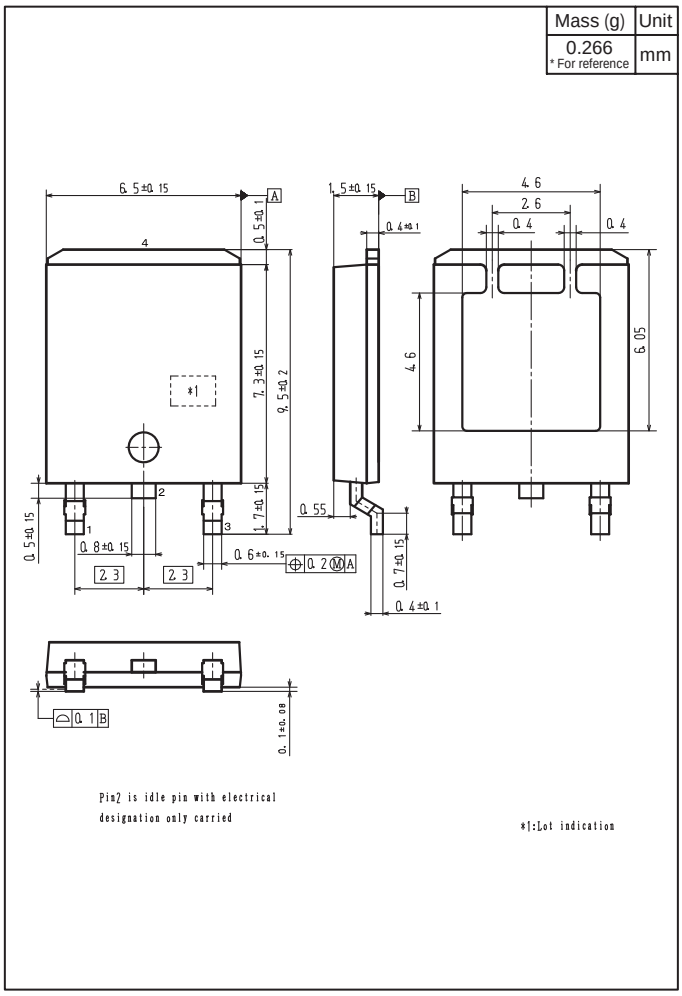
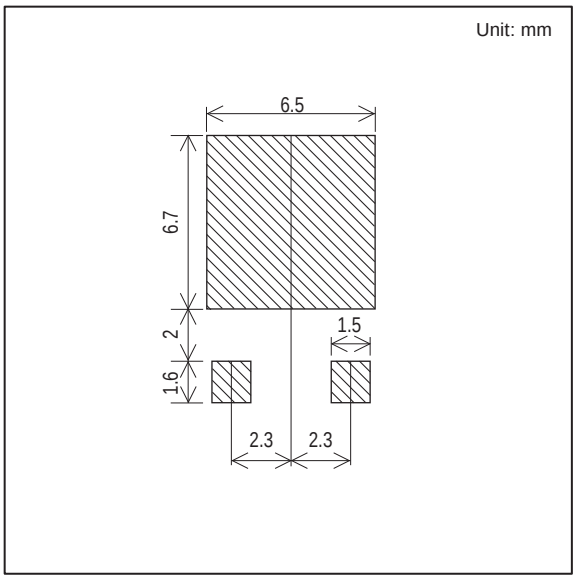
Outline Drawing

ATP208-TL-H



Land Pattern Example



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Note on usage : Since the ATP208 is a MOSFET product, please avoid using this device in the vicinity of highly charged objects.

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