Electrical Characteristics at Ta=25°C

Deremotor	Symbol	Conditions	Ratings			Unit
Parameter			min	typ max		
Drain-to-Source Breakdown Voltage	V(BR)DSS	ID=1mA, VGS=0V	40			V
Zero-Gate Voltage Drain Current	IDSS	V _{DS} =40V, V _{GS} =0V			1	μΑ
Gate-to-Source Leakage Current	IGSS	V _{GS} =±16V, V _{DS} =0V			±10	μΑ
Cutoff Voltage	VGS(off)	V _{DS} =10V, I _D =1mA	1.5		2.6	V
Forward Transfer Admittance	yfs	V _{DS} =10V, I _D =20A	9	15		S
Statia Drain to Source On State Resistance	R _{DS} (on)1	ID=20A, VGS=10V		12	16	mΩ
Static Drain-to-Source On-State Resistance	R _{DS} (on)2	ID=10A, VGS=4.5V		20	28	mΩ
Input Capacitance	Ciss			1630		pF
Output Capacitance	Coss	V _{DS} =20V, f=1MHz		205		рF
Reverse Transfer Capacitance	Crss			110		рF
Turn-ON Delay Time	t _d (on)			19		ns
Rise Time	tr	See specified Test Circuit		110		ns
Turn-OFF Delay Time t _d (off)		See specified lest circuit.		83		ns
Fall Time	tf			73		ns
Total Gate Charge	Qg			27		nC
Gate-to-Source Charge	Qgs	V _{DS} =20V, V _{GS} =10V, I _D =40A		7.0		nC
Gate-to-Drain "Miller" Charge	Qgd			5.2		nC
Diode Forward Voltage	VSD	IS=40A, VGS=0V		0.99	1.2	V

Switching Time Test Circuit



Ordering Information

Device	Package	Shipping	memo
ATP206-TL-H	ATPAK	3,000pcs./reel	Pb Free and Halogen Free





Taping Specification ATP206-TL-H

1. Packing Format (TL)

Dackage Name	Carrier Tape	Maximum Number of devices contained (pcs)			Packing format		
Package Name	Туре	Reel	Inner box	Outer box	INNER BOX SD-C-18	OUTER BOX SD-A-18	
					1 reels contained	5 inner boxes contained	
ATPAK	ΑΤΡ	3,000	003,000	15,000	Dimensions:mm (external)	Dimensions:mm (external)	
					340×340×28	355×355×165	



Reel	label,	Inner	box	label
	(ນ	init:	mm)	

 \rightarrow

69

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

		L		108
				-
			TYPE CODE	*000000000*
			TYPE	00000000
0			QTY	0, 000 pcs (1) LEAD FREE #
8 (lot	00000000
		PACKAGE	00000000	
-			SPECIAL	*Z0722005310C*
			ASSEMBLY:	extex (DIFFUSION: *****)

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



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

Outline Drawing ATP206-TL-H



Land Pattern Example

Note on usage : Since the ATP206 is a MOSFET product, please avoid using this device in the vicinity of highly charged objects.

ON Semiconductor and the ON logo are registered trademarks of Semiconductor Components Industries, LLC (SCILLC). SCILLC owns the rights to a number of patents, trademarks, copyrights, trade secrets, and other intellectual property. A listing of SCILLC's product/patent coverage may be accessed at www.onsemi.com/site/pdf/Patent-Marking.pdf. SCILLC reserves the right to make changes without further notice to any products herein. SCILLC makes no warranty, representation or guarantee regarding the suitability of its products for any particular purpose, nor does SCILLC assume any liability arising out of the application or use of any product or circuit, and specifically disclaims any and all liability, including without limitation special, consequential or incidental damages. "Typical" parameters which may be provided in SCILLC data sheets and/or specifications can and do vary in different applications and actual performance may vary over time. All operating parameters, including "Typical" must be validated for each customer application by customer's technical experts. SCILLC does not convey any license under its patent rights nor the rights of others. SCILLC products are not designed, intended, or authorized for use as components in systems intended for surgical implant into the body, or other applications intended to support or sustain life, or for any other application in which the failure of the SCILLC product could create a situation where personal injury or death may occur. Should Buyer purchase or use SCILLC products for any such unintended or unauthorized application, Buyer shall indemnify and hold SCILLC and its officers, employees, subsidiaries, affiliates, and featnassociated with such unintended or unauthorized use, even if such claim alleges that SCILLC was negligent regarding the design or manufacture of the part. SCILLC is an Equal Opportunity/Affirmative Action Employer. This literature is subject to all applicable copyright laws and is not for resale in any manner.