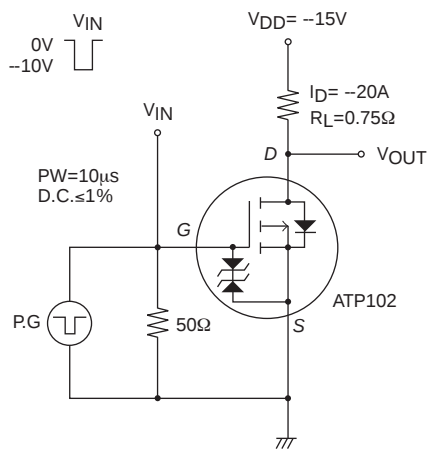


ATP102

Electrical Characteristics at Ta=25°C

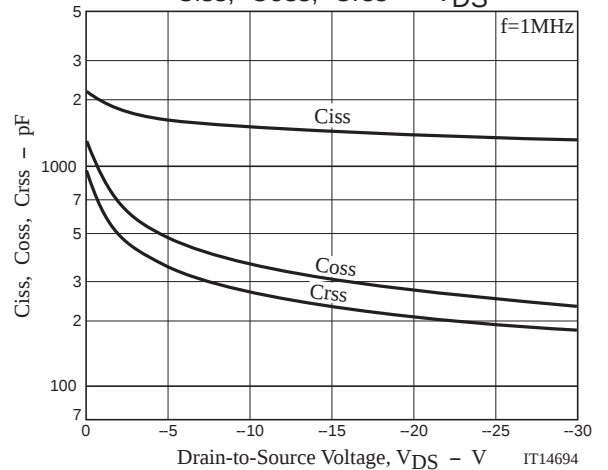
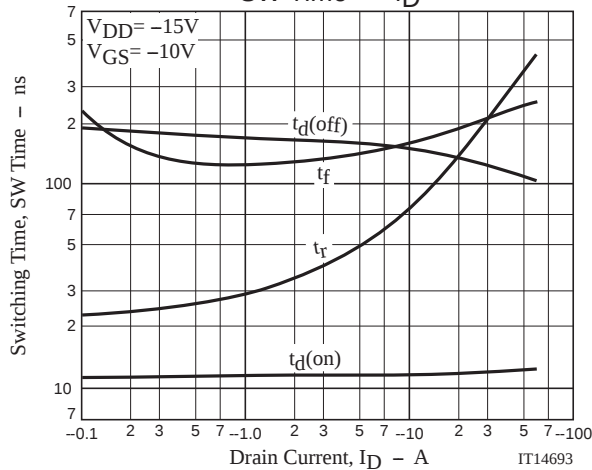
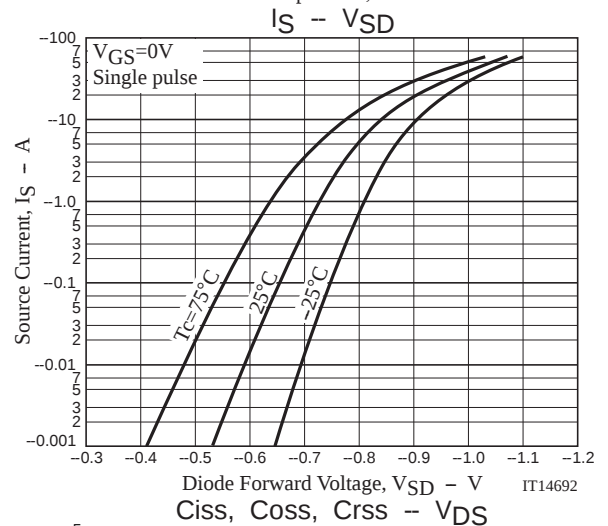
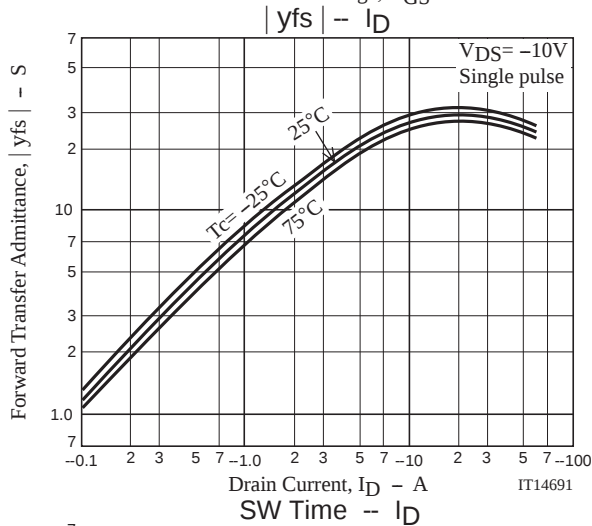
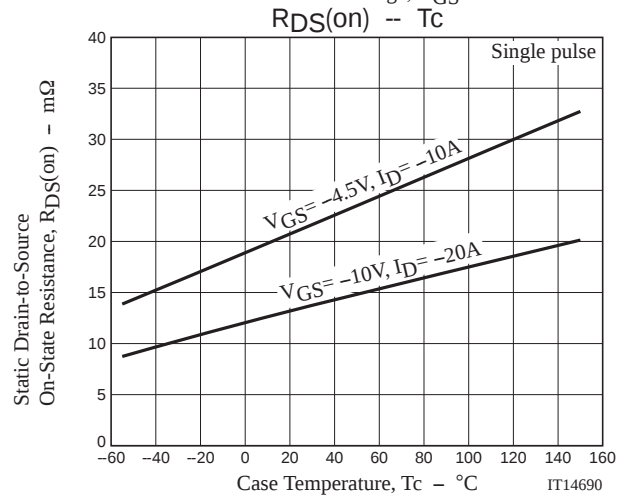
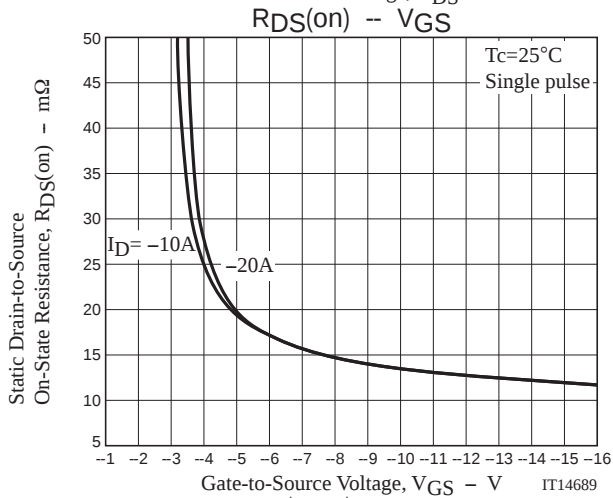
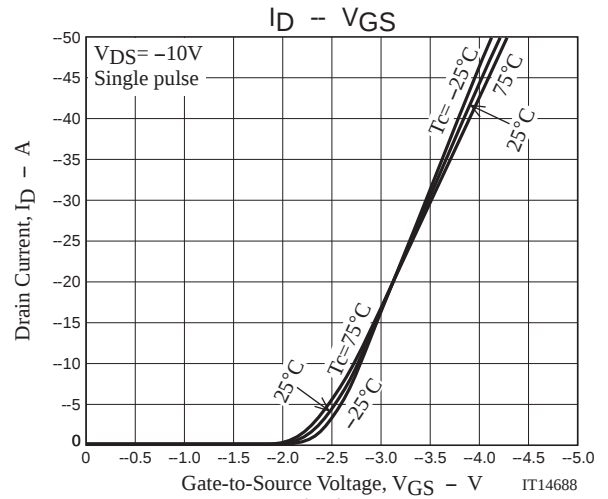
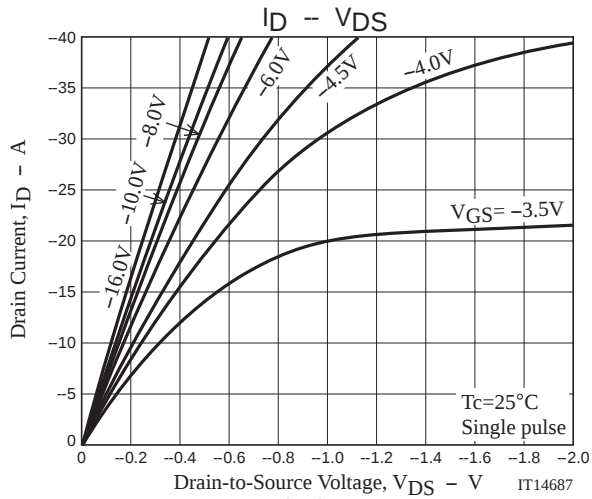
Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Drain-to-Source Breakdown Voltage	V(BR)DSS	ID=-1mA, VGS=0V	-30			V
Zero-Gate Voltage Drain Current	IDSS	VDS=-30V, VGS=0V			-1	μA
Gate-to-Source Leakage Current	IGSS	VGS=±16V, VDS=0V			±10	μA
Cutoff Voltage	VGS(off)	VDS=-10V, ID=-1mA	-1.2		-2.6	V
Forward Transfer Admittance	yfs	VDS=-10V, ID=-20A		29		S
Static Drain-to-Source On-State Resistance	RDS(on)1	ID=-20A, VGS=-10V		14	18.5	mΩ
	RDS(on)2	ID=-10A, VGS=-4.5V		22	31	mΩ
Input Capacitance	Ciss	VDS=-10V, f=1MHz		1490		pF
Output Capacitance	Coss			360		pF
Reverse Transfer Capacitance	Crss			270		pF
Turn-ON Delay Time	td(on)	See specified Test Circuit.		11		ns
Rise Time	tr			135		ns
Turn-OFF Delay Time	td(off)			135		ns
Fall Time	tf			185		ns
Total Gate Charge	Qg	VDS=-15V, VGS=-10V, ID=-40A		34		nC
Gate-to-Source Charge	Qgs			4.2		nC
Gate-to-Drain "Miller" Charge	Qgd			11.5		nC
Diode Forward Voltage	VSD	IS=-40A, VGS=0V		-0.99	-1.5	V

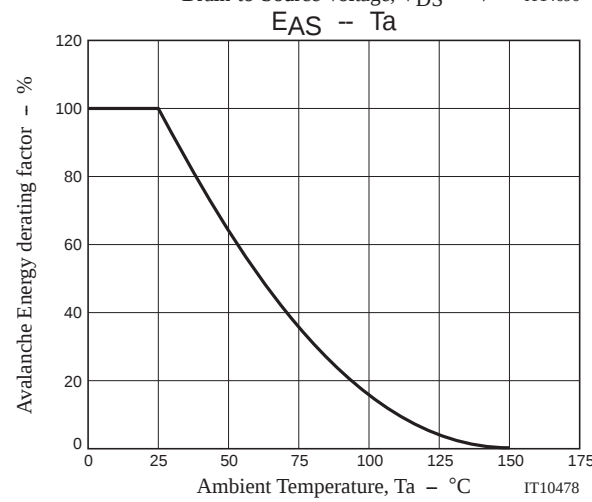
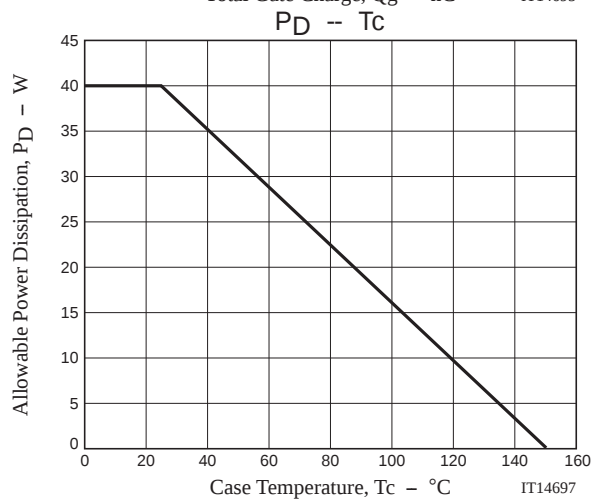
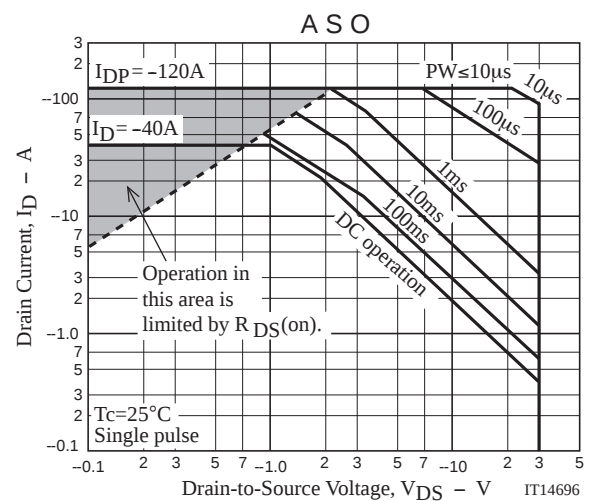
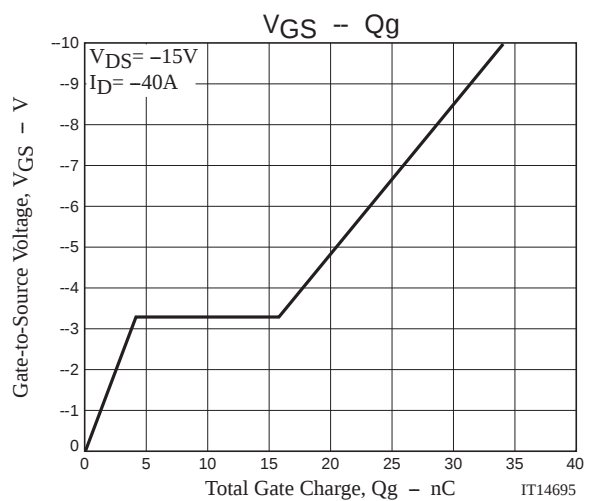
Switching Time Test Circuit



Ordering Information

Device	Package	Shipping	memo
ATP102-TL-H	ATPAK	3,000pcs./reel	Pb Free and Halogen Free





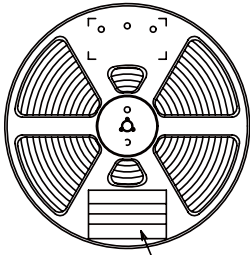
Taping Specification

ATP102-TL-H

1. Packing Format (TL)

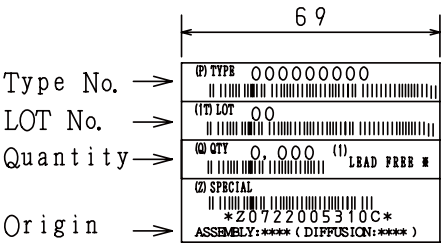
Package Name	Carrier Tape Type	Maximum Number of devices contained (pcs)			Packing format	
		Reel	Inner box	Outer box	INNER BOX SD-C-18	OUTER BOX SD-A-18
ATPAK	ATP	3,000	3,000	15,000	1 reels contained Dimensions:mm (external) 340×340×28	5 inner boxes contained Dimensions:mm (external) 355×355×165

Packing method



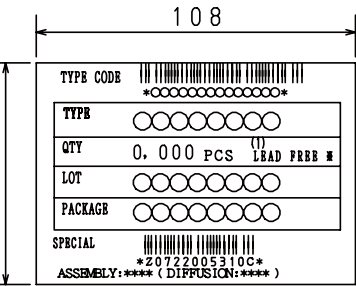
Reel label

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.

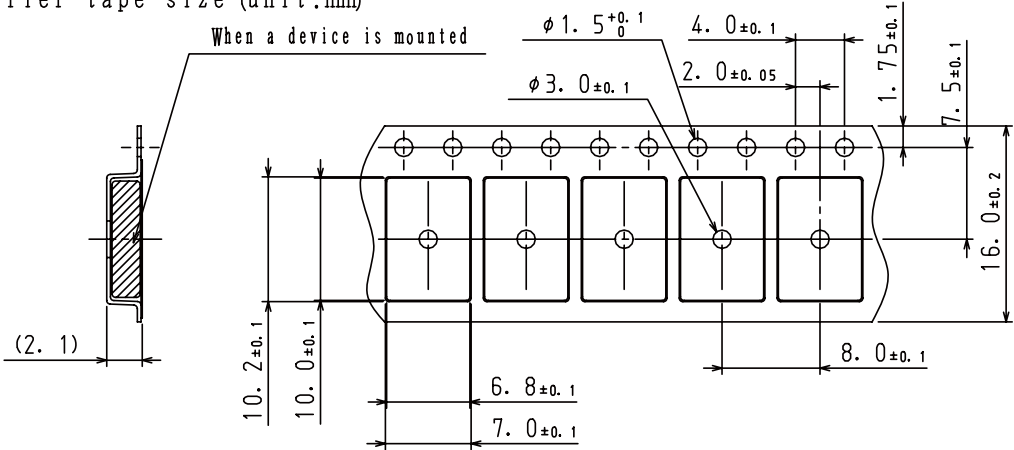


NOTE (1)
The LEAD FREE * description shows that the surface
treatment of the terminal is lead free.

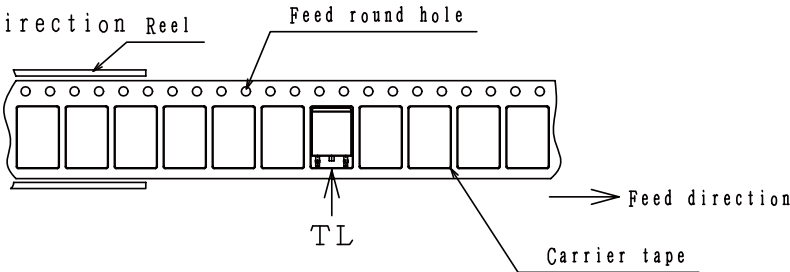
Label	JEITA Phase
LEAD FREE 3	JEITA Phase 3A
LEAD FREE 4	JEITA Phase 3

2. Taping configuration

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

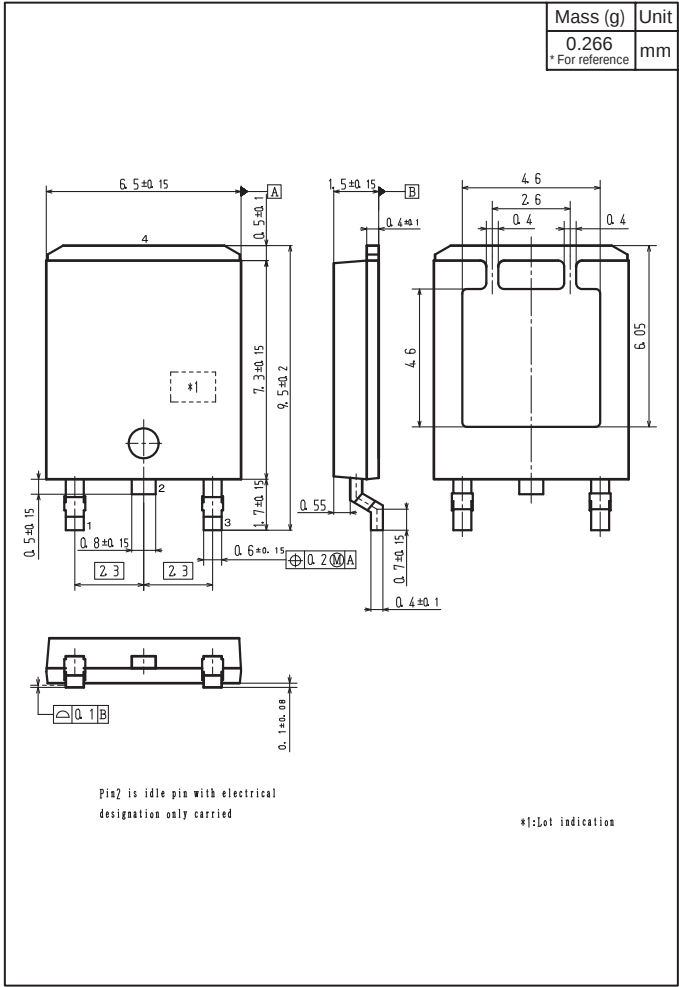


2-2. Device placement direction Reel

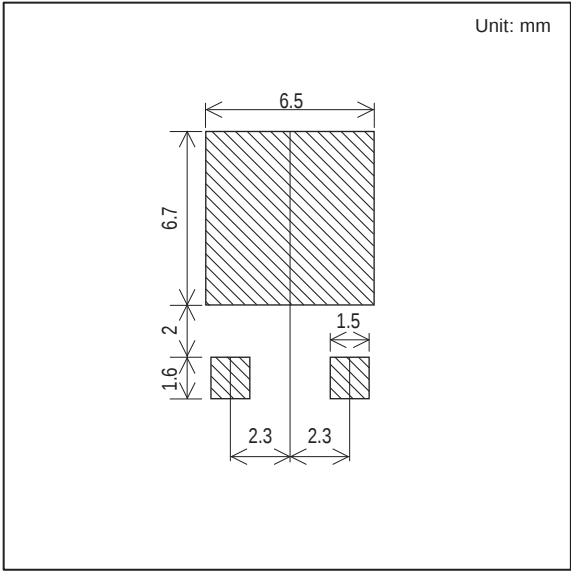


The one electrode terminals on feed hole side...TL

Outline Drawing
ATP102-TL-H



Land Pattern Example



Note on usage : Since the ATP102 is a MOSFET product, please avoid using this device in the vicinity of highly charged objects.

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