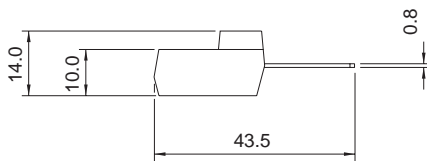
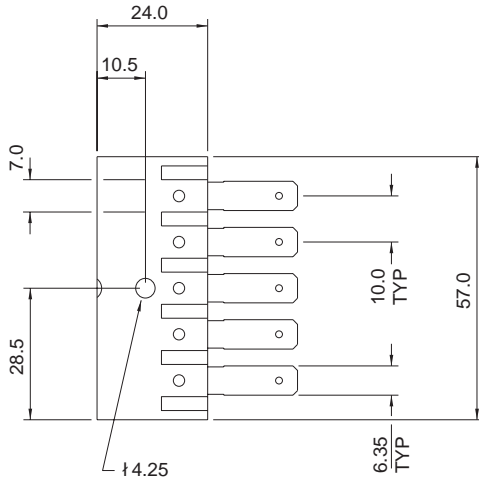


MECHANICAL DATA

Dimensions in mm



CASE 2

SMARTPACK POWER MODULE

POWER MOSFETS FOR AUDIO APPLICATIONS

FEATURES

- N - CHANNEL POWER MOSFETS
- HIGH SPEED SWITCHING
- SEMEFAB DESIGNED AND DIFFUSED
- HIGH VOLTAGE (160V & 200V)
- HIGH ENERGY RATING
- ENHANCEMENT MODE
- INTEGRAL PROTECTION DIODE
- P - CHANNEL AVAILABLE

ABSOLUTE MAXIMUM RATINGS

(T_{case} = 25°C unless otherwise stated)

		LB32N16	LB32N20
V _{DSX}	Drain – Source Voltage	160V	200V
V _{GSS}	Gate – Source Voltage	±14V	
I _D	Continuous Drain Current	32A	
I _{D(PK)}	Body Drain Diode	32A	
P _D	Total Power Dissipation @ T _{case} = 25°C	500W	
T _{stg}	Storage Temperature Range	-55 to 150°C	
T _j	Maximum Operating Junction Temperature	150°C	
R _{θJC}	Thermal Resistance Junction – Case	0.3°C/W	

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

Characteristic		Test Conditions		Min.	Typ.	Max.	Unit
BV _{DSX}	Drain – Source Breakdown Voltage	V _{GS} = -10V I _D = 10mA	LB32N16	160			V
			LB32N20	200			
BV _{GSS}	Gate – Source Breakdown Voltage	V _{DS} = 0	I _G = ±100µA	±14			V
V _{GS(OFF)}	Gate – Source Cut-Off Voltage	V _{DS} = 10V	I _D = 100mA	0.1		1.5	V
V _{DS(SAT)*}	Drain – Source Saturation Voltage	V _{GS} = 10V	I _D = 32A			12	V
I _{DSX}	Drain – Source Cut-Off Current	V _{GS} = -10V	V _{DS} = 160V LB32N16			10	mA
			V _{DS} = 200V LB32N20			10	
yfs*	Forward Transfer Admittance	V _{DS} = 10V	I _D = 5A	2		6	S

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

Characteristic		Test Conditions		TYP	Unit
C _{iss}	Input Capacitance	V _{DS} = 10V f = 1MHz		N-Ch	pF
				TBE	
				TBE	
C _{oss}	Output Capacitance	V _{DS} = 20V I _D = 7A		TBE	ns
C _{rss}	Reverse Transfer Capacitance			TBE	
t _{on}	Turn-on Time	V _{DS} = 20V I _D = 7A		TBE	ns
t _{off}	Turn-off Time			TBE	

* Pulse Test: Pulse Width = 300µs , Duty Cycle ≤ 2%.

