



SANYO Semiconductors

DATA SHEET

An ON Semiconductor Company

2SK3745LS — N-Channel Silicon MOSFET — High-Voltage, High-Speed Switching Applications

Features

- Low ON-resistance, low input capacitance, ultrahigh-speed switching
- High reliability (Adoption of HVP process)
- Micaless package facilitating mounting
- Avalanche resistance guarantee

Specifications

Absolute Maximum Ratings at Ta=25°C

Parameter	Symbol	Conditions	Ratings	Unit
Drain-to-Source Voltage	V _{DSS}		1500	V
Gate-to-Source Voltage	V _{GSS}		±20	V
Drain Current (DC)	I _D [*]		2	A
Drain Current (Pulse)	I _{DP}		4	A
Allowable Power Dissipation	P _D		2.0	W
		T _c =25°C	35	W
Channel Temperature	T _{ch}		150	°C
Storage Temperature	T _{stg}		-55 to +150	°C
Avalanche Energy (Single Pulse) *1	E _{AS}		41	mJ
Avalanche Current *2	I _{AV}		2	A

*Shows chip capability

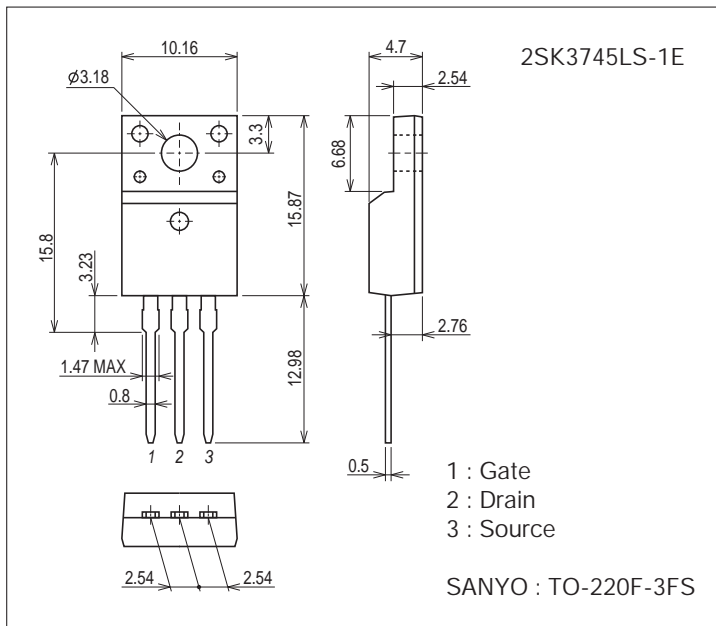
*1 V_{DD}=50V, L=20mH, I_{AV}=2A (Fig.1)

*2 L 20mH, single pulse

Package Dimensions

unit : mm (typ)

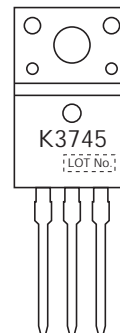
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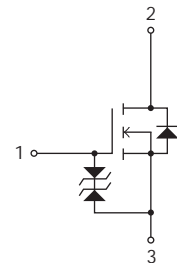
Product & Package Information

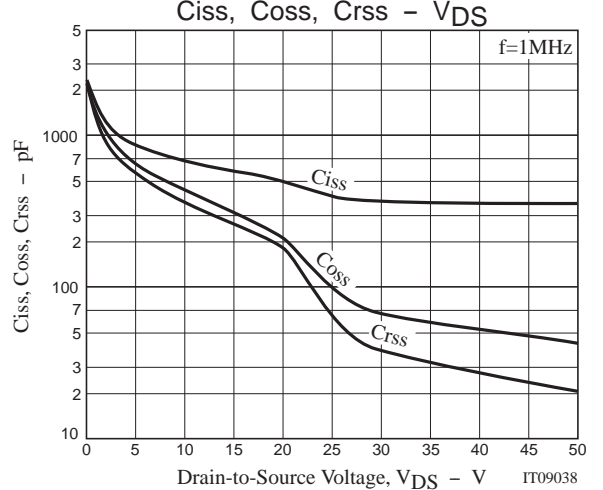
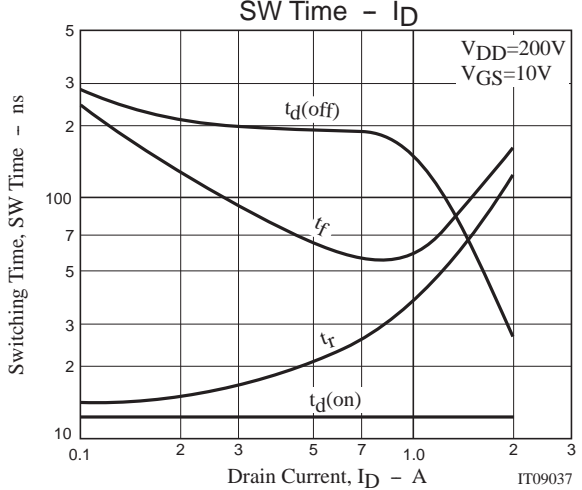
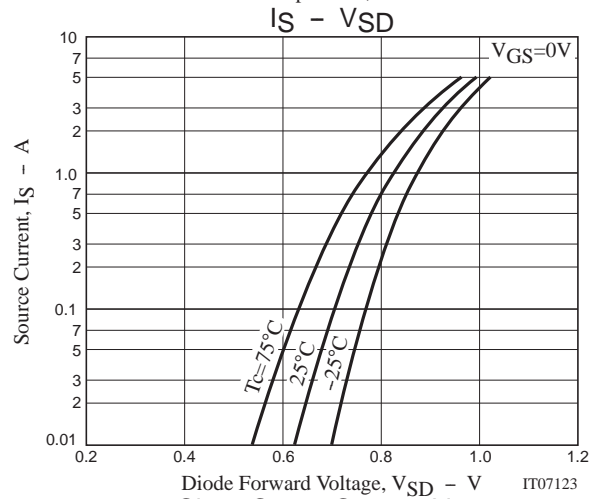
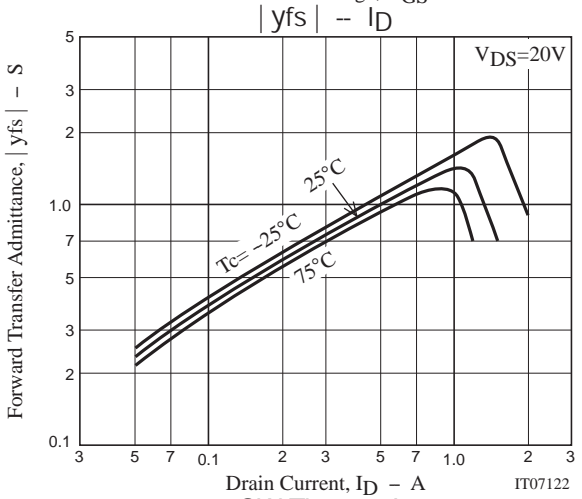
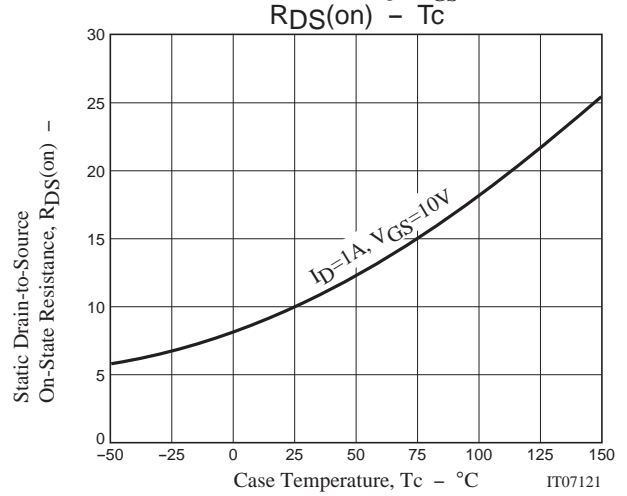
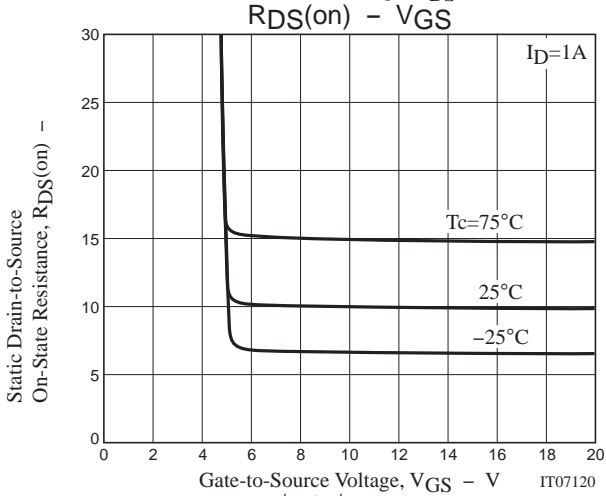
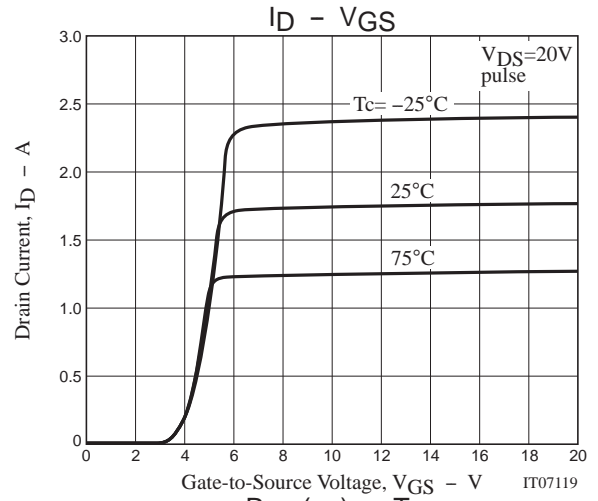
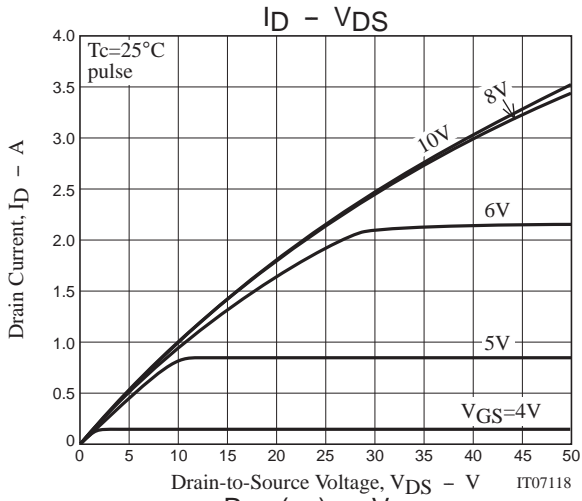
- Package : TO-220F-3FS
- JEITA, JEDEC : SC-67
- Minimum Packing Quantity : 50 pcs./magazine

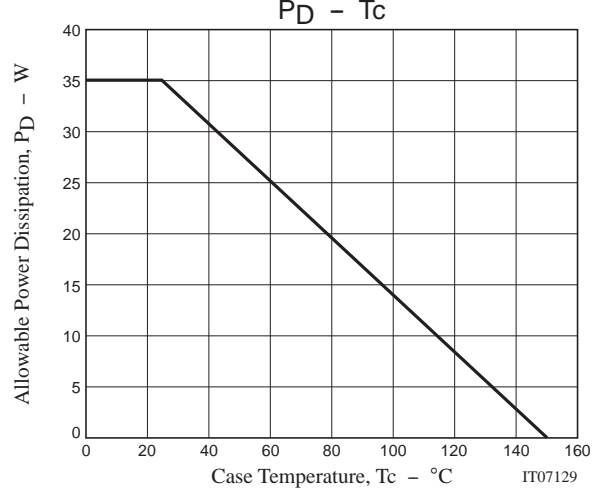
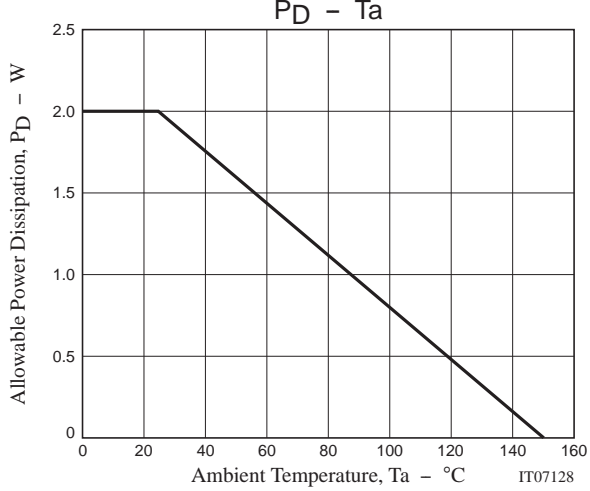
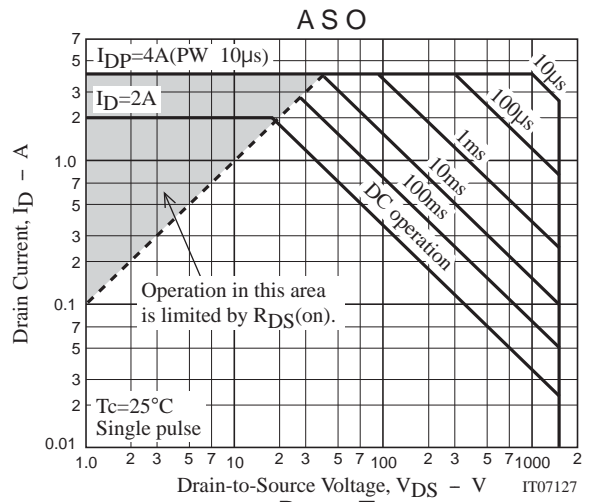
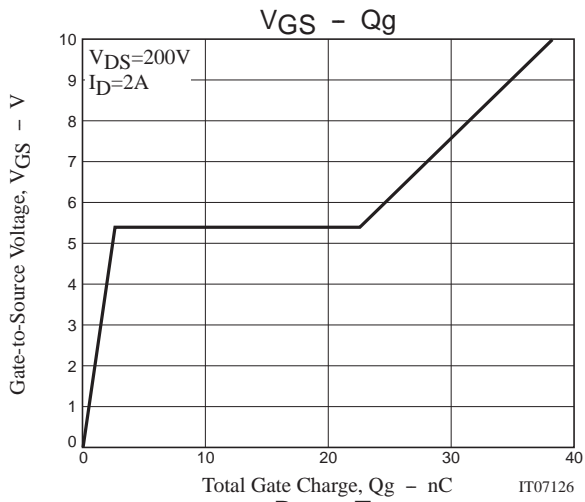
Marking



Electrical Connection







Magazine Specification

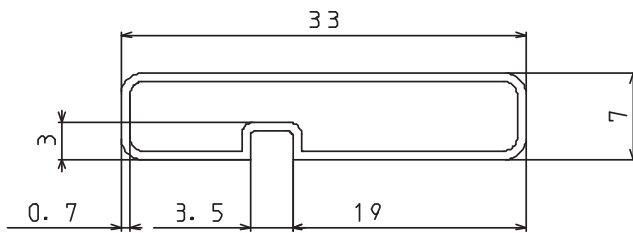
2SK3745LS-1E

1. Packing Format

Package Name	Magazine Name	Maximum Number of devices contained (pcs)			Packing format	
		Magazine	Inner box	Outer box	Inner BOX	Outer BOX
TO-220F-3FS	TO-220F	50	1,000	4,000	SPD-0V0001 20 magazines contained Dimensions:mm (external) 568×150×55	SPT-081029 4 inner boxes contained Dimensions:mm (external) 590×225×178

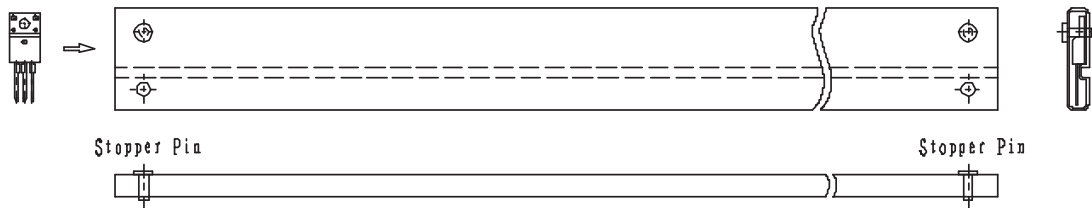
2. Magazine dimensions

(unit:mm)

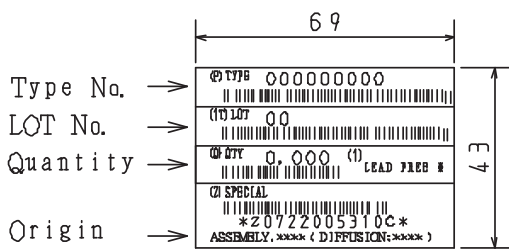


Tolerance=±0.3mm
 Thickness=0.7±0.2mm
 Length =532.5±2mm
 Material =PVC (Antistatic treatment)

3. Storage method to magazine

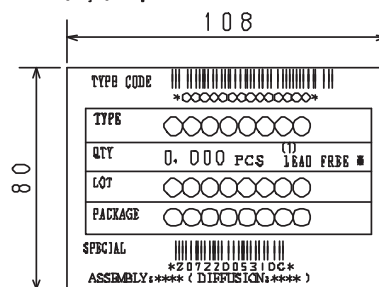


4. Inner box label (unit:mm)



5. Outer box label (unit:mm)

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

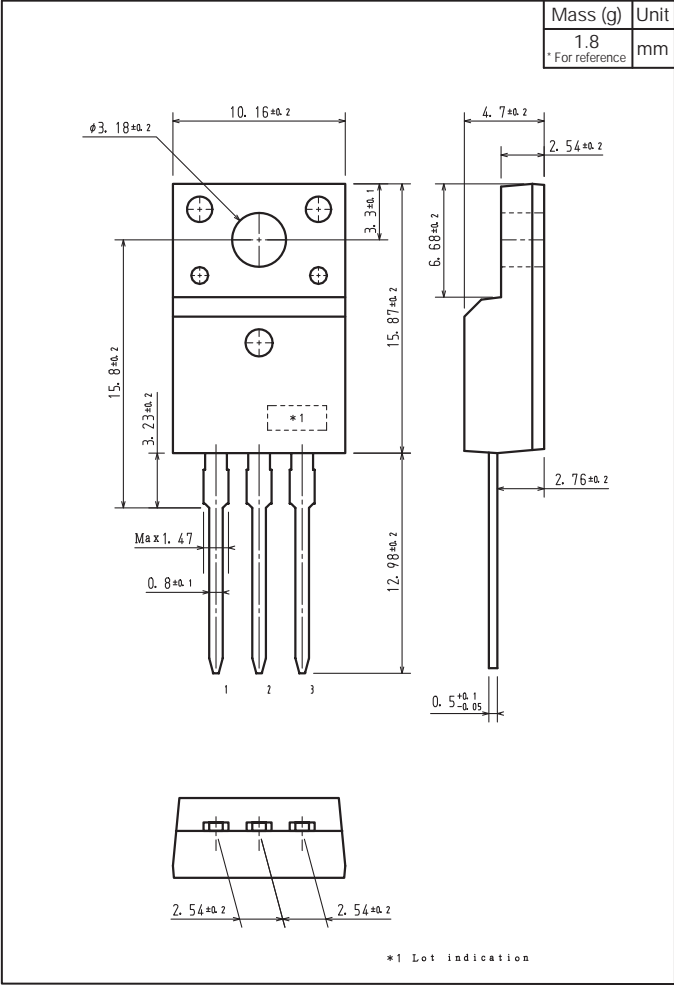


NOTE (1)

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

Label	JEITA Phase
LEAD FREE 3	JEITA Phase 3A

Outline Drawing
2SK3745LS-1E



Note on usage : Since the 2SK3745LS is a MOSFET product, please avoid using this device in the vicinity of highly charged objects.

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