

YSD20100DK

Features

- Low forward voltage
- High current capability
- High forward surge capability
- Low power losses, High efficiency
- Guarding for over voltage protection

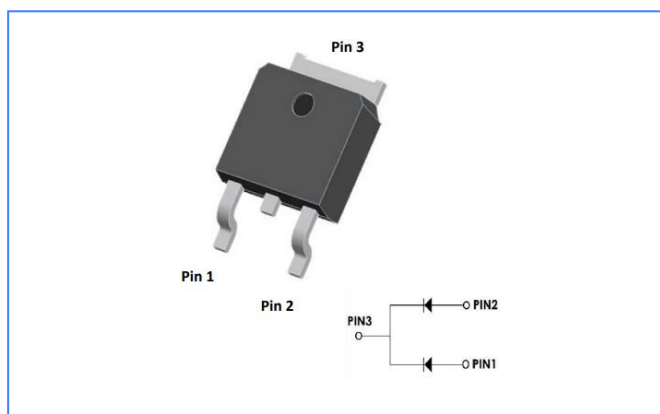
Applications

This Schottky Barrier Rectifier has been designed to meet the stringent requirements of commercial applications

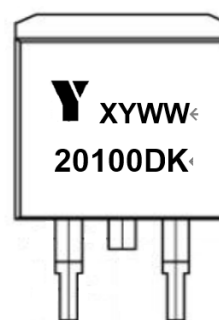
- Polarity Protection Diode
- Re-Circulating Diode
- Switching Diode

Mechanical Data

- Case: TO-252
- Polarity: As marked
- Mounting Position: any
- Terminals: Plated axial leads, solderable per MIL-STD-750, Method 2026



Marking



Primary Characteristi

I_o	2*10A
V_{RRM}	100V
I_{FSM}	2*130A
V_F	0.85V
T_{JMAX}	175°C

Maximum Ratings and Electrical Characteristics(TA=25°C unless otherwise noted)

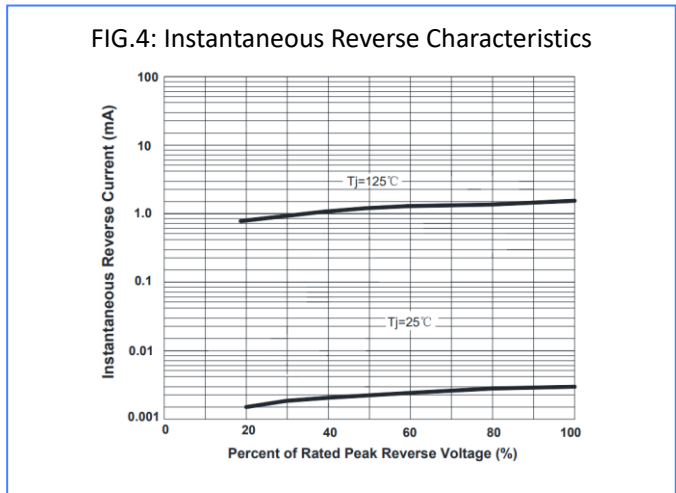
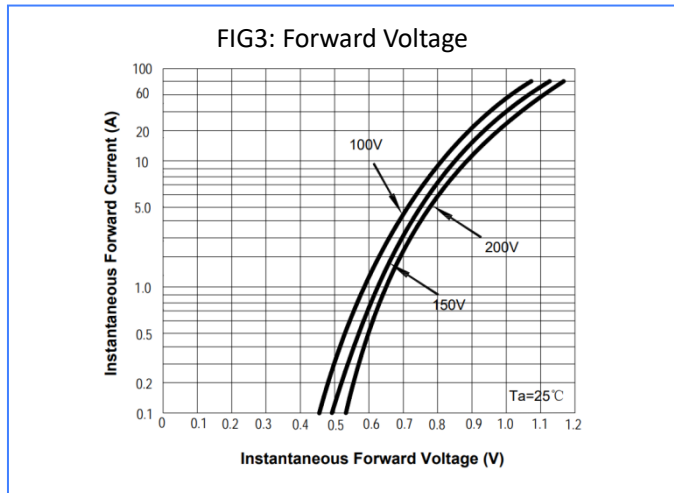
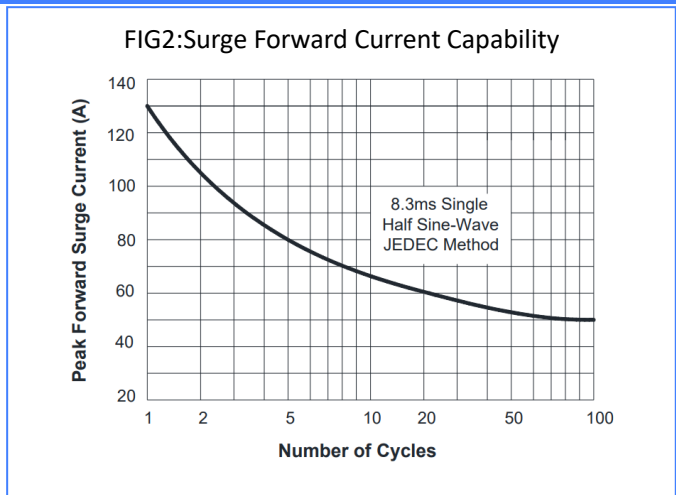
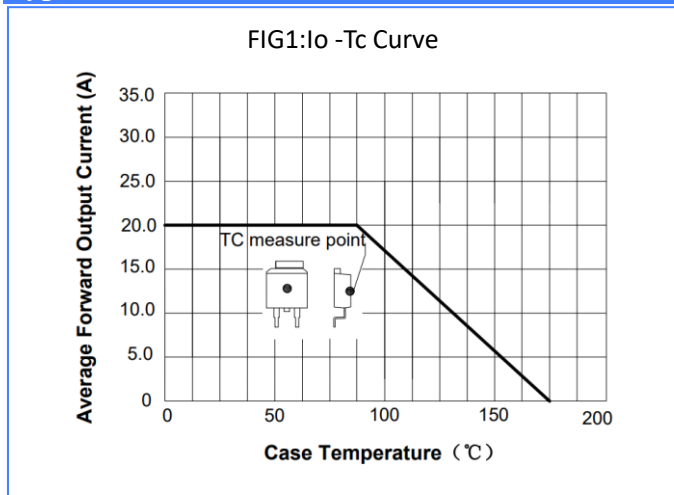
Symbol	Parameter	Value	Unit
V_{RRM}	Peak Repetitive Reverse Voltage	100	V
V_{RWM}	Working Peak Reverse Voltage		
V_R	DC Blocking voltage		
I_o	Maximum average forward rectified current	Per leg	10.0
		Total	20.0
I_{FSM}	Peak Forward Surge Current,8.3 ms Single Half Sine-wave	150	A
$R_{\theta JC}$	Typical Thermal Resistance (Note1)	6	°C/W
T_j	Operating Temperature Range	-55~+175	°C
T_{stg}	Storage Temperature	-55~+175	°C

Note1: Thermal resistance from Junction to case per leg mounted on heatsink.

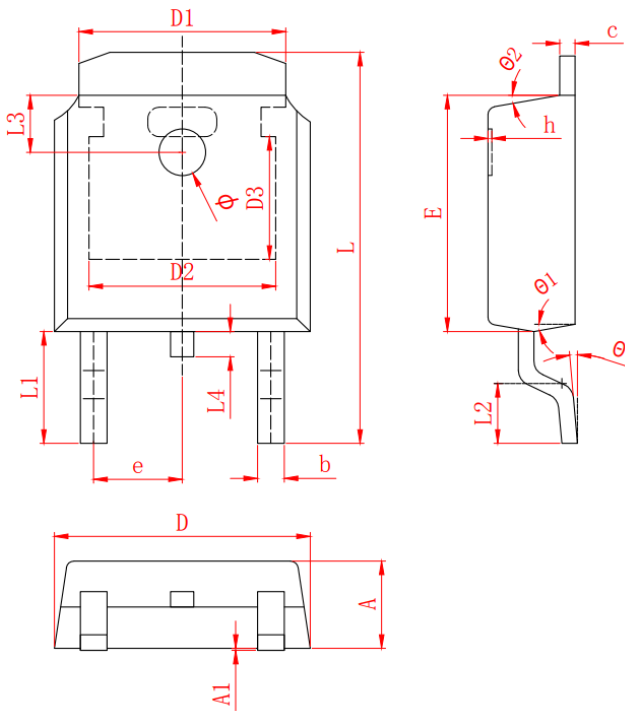
Electrical Characteristics (Per Leg) unless otherwise specified

Characteristics	Symbol	Value		Unit
		TYP.	MAX.	
Forward Voltage Drop at $I_F=20A$	V_F		0.85	V
		$T_A=25^\circ C$		
Maximum Reverse Current at $V_R=100V$	I_R		0.05	mA
		$T_A=125^\circ C$	20	mA

Typical Character



Package Outline Dimensions in millimeters



SYMBOL	MILLIMETER		SYMBOL	MILLIMETER	
	MIN	MAX		MIN	MAX
A	2.200	2.400	h	0.000	0.200
A1	0.000	0.127	L	9.900	10.30
b	0.640	0.740	L1	2.888 REF	
c	0.460	0.580	L2	1.400	1.700
D	6.500	6.700	L3	1.600 REF	
D1	5.334 REF		L4	0.600	1.000
D2	4.826 REF		phi	1.100	1.300
D3	3.166 REF		theta	0°	8°
E	6.000	6.200	theta 1	9° TYP	
e	2.286 TYP		theta 2	9° TYP	

Disclaimer

Specifications are subject to change without notice.

The device characteristics and parameters in this data sheet can and do vary in different applications and actual device performance may vary over time.

Users should verify actual device performance in their specific applications.