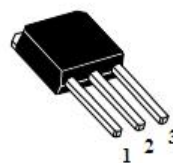


## PS20U60DS&PS20U60GS

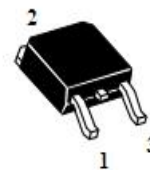
### 20.0AMPS. SCHOTTKY BARRIER RECTIFIERS

#### FEATURE

- . High current capability
- . Ultra low forward voltage drop
- . Low power loss, high efficiency
- . High surge capability
- . High temperature soldering guaranteed  
260°C /10seconds, 0.25"(6.35mm)from case.



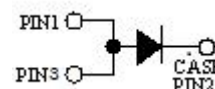
TO-251  
PS20U60DS



TO-252  
PS20U60GS

#### MECHANICAL DATA

- . Case: Molded with UL-94 Class V-0 recognized  
Flame Retardant Epoxy
- . Mounting position: any



Single phase, half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%

#### MAXIMUM RATINGS ( $T_C=25^\circ\text{C}$ unless otherwise noted)

Parameter	Symbol	PS20U60DS&PS20U60GS	Units
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	60	V
Maximum RMS Voltage	$V_{RMS}$	42	V
Maximum DC blocking Voltage	$V_{DC}$	60	V
Maximum Average Forward Rectified Current at $T_C=100^\circ\text{C}$ <span style="float: right;"><i>Total device</i></span>	$I_{F(AV)}$	20.0	A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC method) <span style="float: right;"><i>Terminals 1 and 3 short circuited</i></span>	$I_{FSM}$	150.0	A
Typical Junction Capacitance (Note 1)	$C_J$	780	pF
Operation Junction Temperature and Storage Temperature	$T_J, T_{STG}$	-55 to +150	$^\circ\text{C}$

#### ELECTRICAL CHARACTERISTICS ( $T_C=25^\circ\text{C}$ unless otherwise noted)

Parameter	Symbol	Test conditions	Typ	Max	Units	
Forward voltage drop	$V_F$	$T_J=25^\circ\text{C}$	IF= 5.0A	0.38	----	V
			IF=20.0A	0.57	0.65	
		$T_J=125^\circ\text{C}$	IF= 5.0A	0.32	----	
			IF=20.0A	0.54	0.64	
Reverse leakage Current	$I_R$	$T_J=25^\circ\text{C}$	VR=60V	----	250	$\mu\text{A}$
		$T_J=125^\circ\text{C}$	VR=60V	----	50.0	mA

#### THERMAL CHARACTERISTICS ( $T_C=25^\circ\text{C}$ unless otherwise noted)

Parameter	Symbol	PS20U60DS	PS20U60GS	Units
Typical Thermal Resistance (Note 2)	$R_{(JC)}$	6.5	6.5	$^\circ\text{C}/\text{W}$

#### Notes:

1. Measured at 1.0 MHz and applied reverse voltage of 4.0Vdc
2. Thermal Resistance from Junction to Case

RATING AND CHARACTERISTIC CURVES

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

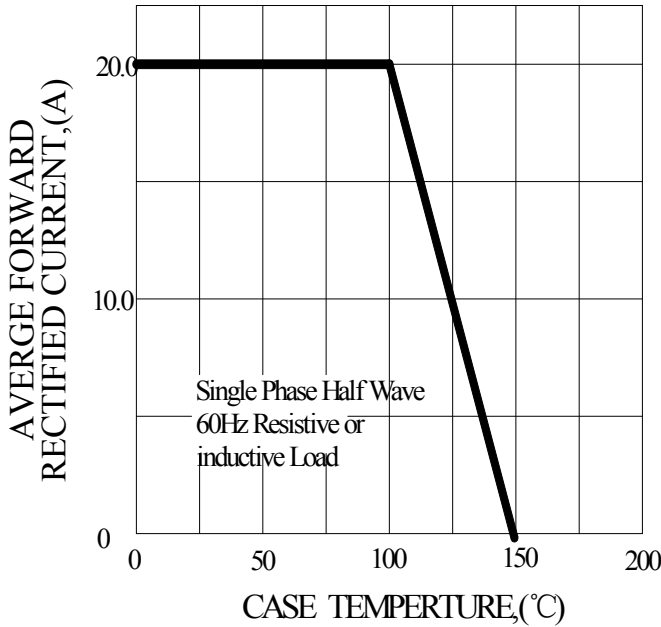


FIG.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

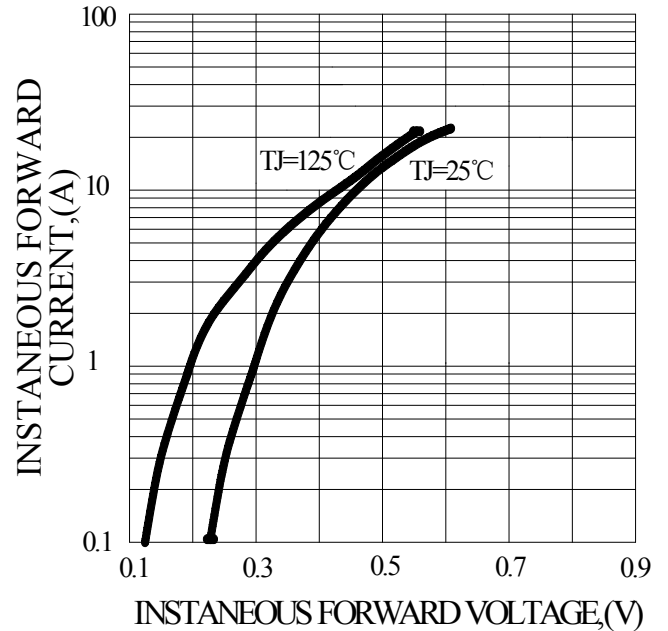


FIG.3-MAXIMUN NON-REPETITIVE FORWARD SURGE CURRENT

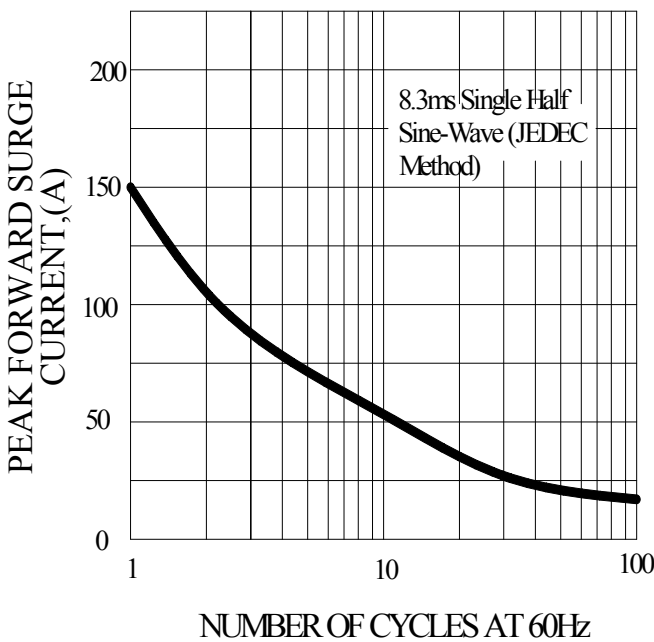
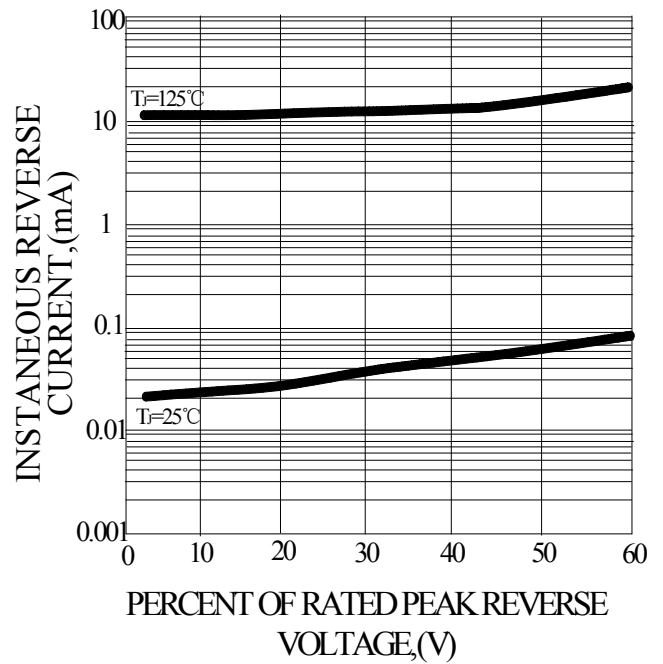
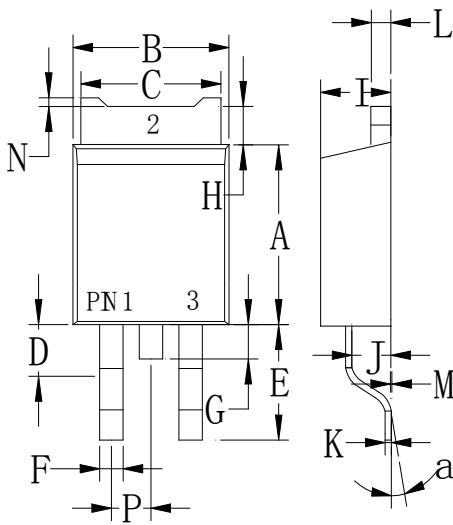


FIG.4-TYPICAL REVERSE CHARACTERISTICS



**PACKAGE OUTLINE DIMENSIONS**

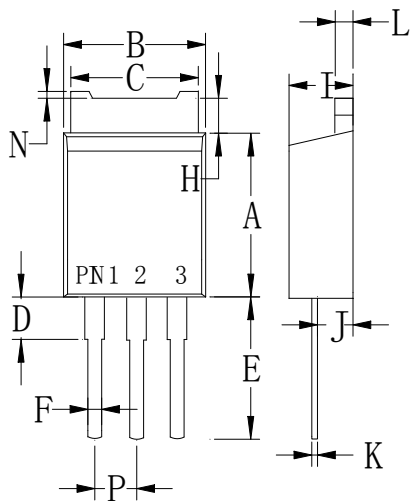
**TO-252**



TO-252		
Dim	Min	Max
A	.230 (5.85)	.246 (6.25)
B	.250 (6.35)	.264 (6.75)
C	.207 (5.27)	.218 (5.54)
D	.037 (0.93)	.045 (1.14)
E	.106 (2.70)	.138 (3.50)
F	.028 (0.72)	.033 (0.84)
G	.024 (0.60)	.041 (1.05)
H	.028 (0.72)	.043 (1.10)
I	.085 (2.15)	.096 (2.45)
J	.037 (0.95)	.047 (1.20)
K	.018 (0.45)	.026 (0.65)
L	.018 (0.45)	.024 (0.60)
P	.081 (2.05)	.094 (2.40)
M	.000 (0.00)	.006 (0.15)
N	--	.008 (0.20)
a	0°	10°

Dimensions in inches and (millimeters)

**TO-251**

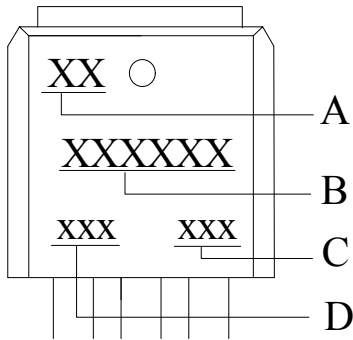


TO-251		
Dim	Min	Max
A	.230 (5.85)	.246 (6.25)
B	.250 (6.35)	.266 (6.75)
C	.207 (5.27)	.218 (5.54)
D	.037 (0.93)	.045 (1.14)
E	.173 (4.40)	.205 (5.20)
F	.028 (0.72)	.033 (0.84)
H	.028 (0.70)	.043 (1.10)
I	.085 (2.15)	.096 (2.45)
J	.037 (0.95)	.047 (1.20)
K	.018 (0.45)	.026 (0.65)
L	.018 (0.45)	.024 (0.60)
N	--	.008 (0.20)
P	.081 (2.05)	.094 (2.40)

Dimensions in inches and (millimeters)

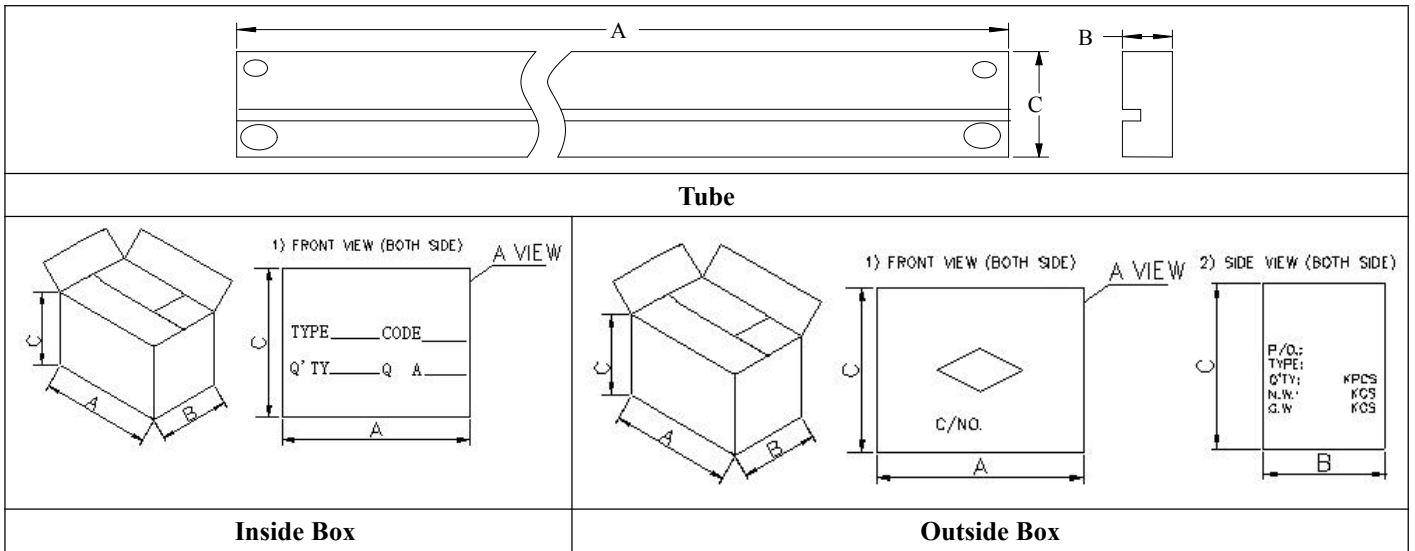
## Marking and packaging illustration

### 1、Marking (TO-251/252)



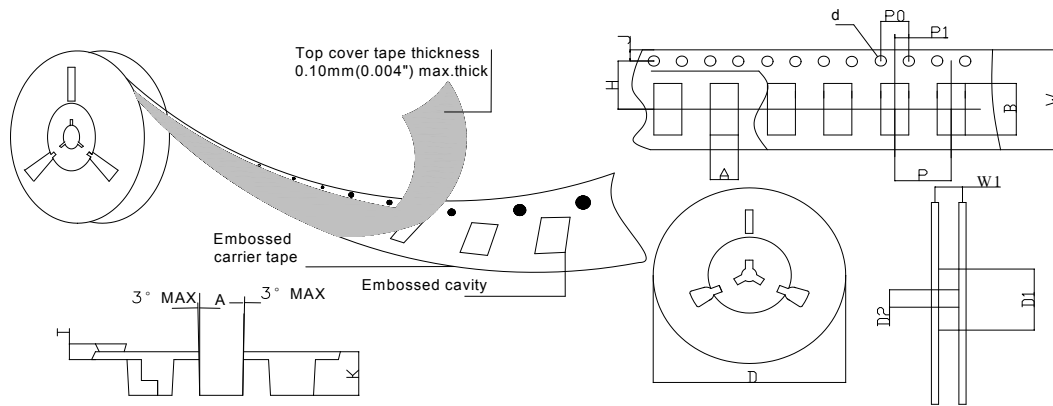
SYMBOL	Explanation
<b>A</b>	Trademark
<b>B</b>	Product Name
<b>C</b>	Date Code
<b>D</b>	Product Information

### 2、Packaging (TO-251)



类别	A (mm)	B (mm)	C (mm)
T0-251 Tube (80EA per tube )	540±5	4±0.8	20±1
T0-251 Inside Box (4.48K per box)	545±5	80±2	60±1
T0-251 outside Box (26.88K per box)	555±5	185±5	215±5

### 3、Packaging (TO-252)



SPECIFICATIONS mm(inch)		PACKAGE	SPECIFICATIONS mm(inch)		PACKAGE
ITEM	SYM BOL	TO-252	ITEM	SYM BOL	TO-252
Carrier width	A	7.10(0.280)Max	Carrier depth	K	2.79(0.110)Typ
Carrier length	B	10.7(0.421)Max	Punch hole pitch	P	8.00(0.315)Typ
Sprocket hole	d	ø1.50(0.059)Typ	Sprocket hole pitch	P0	4.00(0.157)Typ
Reel outer diameter	D	330.0(13.0)Typ	Embossment center	P1	2.00(0.079)Typ
Reel inner diameter	D1	74.0(2.913)Min	Overall tape thickness	T	0.25(0.010)Typ
Feed hole diameter	D2	13.0(0.512)Typ	Tape width	W	16.0(0.630)Typ
Sprocket hole position	J	1.75(0.069)Typ	Reel width	W1	16.5(0.650)Min
Punch hole position	H	7.50(0.295)Typ			