

## FEATURES

- ✧ High current capability, low forward voltage
- ✧ Excellent high temperature stability
- ✧ Low power loss, and high efficiency
- ✧ High forward surge capability
- ✧ RoHS compliant, and Halogen free

## MACHANICAL DATA

- ✧ Case: TO-277B small outline plastic package
- ✧ Terminal: Matte tin plated, solderable per MIL-STD-750, Method 2026
- ✧ Molding Compound Flammability Rating:UL94-0
- ✧ High temperature soldering guaranteed:  
260°C /10second
- ✧ Packed with FRP substrate and epoxy underfilled

## ORDERING INFORMATION

- ✧ Device: GSD15S60SL
- ✧ Package: TO-277B
- ✧ Marking: H15T60
- ✧ Material: Halogen free
- ✧ Packing: Tape & 13" Reel
- ✧ Quantity per reel: 5,000pcs

## APPLICATIONS

- ✧ Switching mode power supply applications
- ✧ Portable equipment battery applications
- ✧ High frequency rectification
- ✧ DC/DC converter
- ✧ Designed as bypass diodes for solar panels

## PIN CONFIGURATION



## PACKAGE OUTLINE



### ABSOLUTE MAXIMUM RATING (Tamb=25°C, unless otherwise specified)

Symbol	Parameter	Value	Units
$V_{RRM}$	Repetitive Peak Reverse Voltage	60	V
$I_{F(AV)}$	Average Forward Current	15	A
$I_{FSM}$	Peak Forward Surge Current, 8.3ms single half sine-wave	320	A
$T_J$ & $T_{STG}$	Junction and Storage Temperature	-50~+150	°C

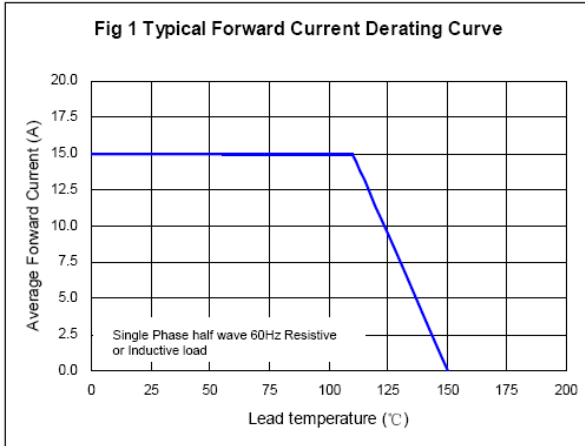
### ELECTRICAL CHARACTERISTICS (Tamb=25°C, unless otherwise specified)

Symbol	Parameter	Test Condition	Min	Typ	Max	Units
$V_F$	Forward Voltage	$I_F = 3A @ 25^\circ C$		0.33	0.37	V
		$I_F = 10A @ 25^\circ C$		0.42	0.47	V
		$I_F = 15A @ 25^\circ C$		0.47	0.52	V
		$I_F = 3A @ 125^\circ C$		0.24		V
		$I_F = 10A @ 125^\circ C$		0.38		V
		$I_F = 15A @ 125^\circ C$		0.46		V
$V_R$	Reverse Breakdown Voltage	$I_R = 0.5mA$	60			V
$I_R$	Reverse Leakage Current	$V_R = 60V @ 25^\circ C$			0.30	mA
		$V_R = 60V @ 125^\circ C$			60	mA
$C_J$	Junction Capacitance	f=1MHz, $V_R=4V$		850		pF
$R_{th(JA)}$	Thermal Resistance Junction to Ambient (note 1)			94		°C/W
$R_{th(JL)}$	Thermal Resistance Junction to Lead (note 1)			10		°C/W

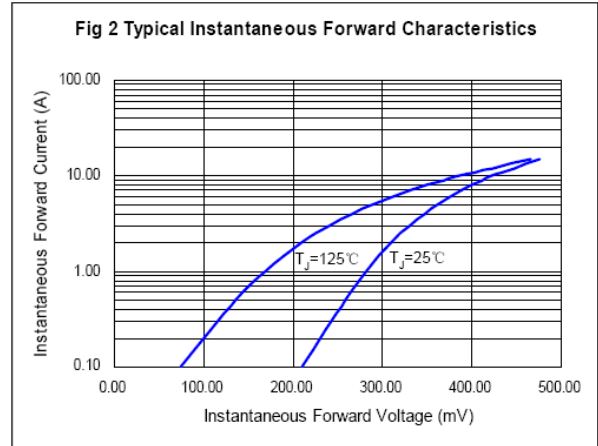
Note 1: Units mounted on recommended P.C.B. 1 oz. pad layout

## ELECTRICAL CHARACTERISTICS CURVE

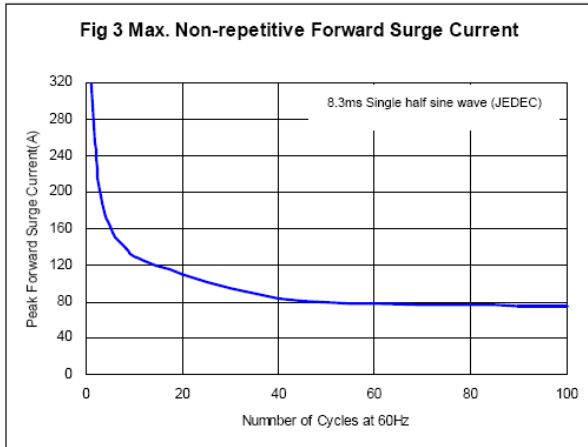
**Fig 1 Typical Forward Current Derating Curve**



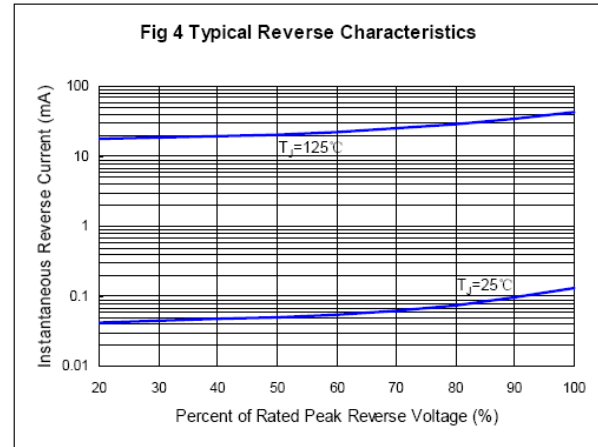
**Fig 2 Typical Instantaneous Forward Characteristics**



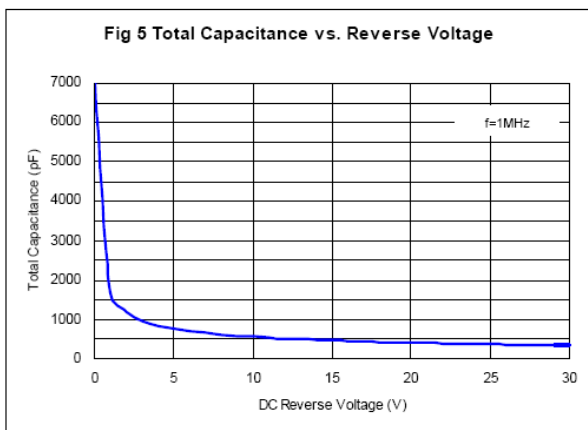
**Fig 3 Max. Non-repetitive Forward Surge Current**



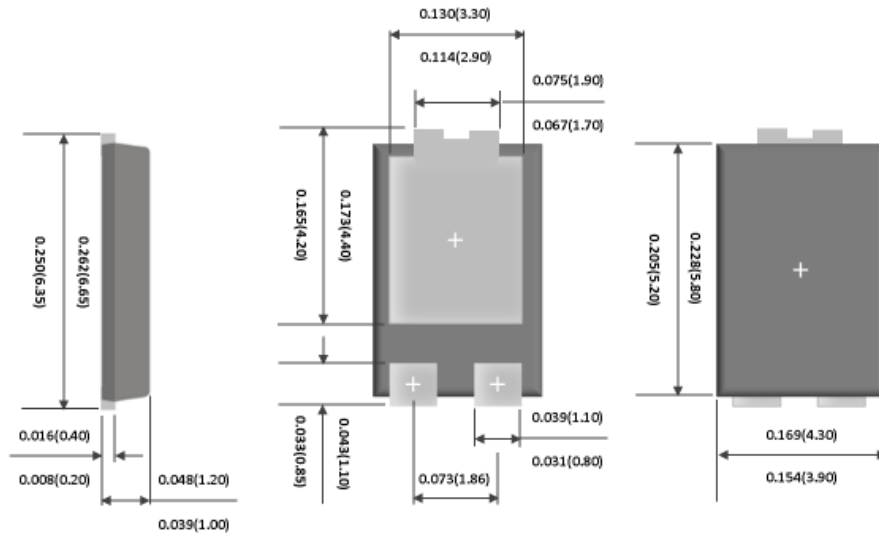
**Fig 4 Typical Reverse Characteristics**



**Fig 5 Total Capacitance vs. Reverse Voltage**

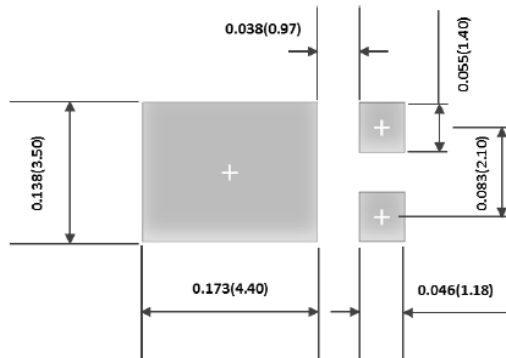


## TO-277B PACKAGE OUTLINE DIMENSIONS



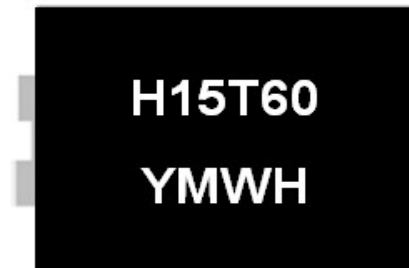
unit: mm

## FOOT PRINT RECOMMENDATION



unit: mm

## MARKING CODE



H15T60	YMWH
Device code	Y=Year (4=2014,5=2015...) M=Month (A~L) W=Week (1~5) H=Halogen Free