



**Low VF Schottky Barrier Rectifier
Reverse Voltage 60 Volts, Forward Current 25 Amperes**

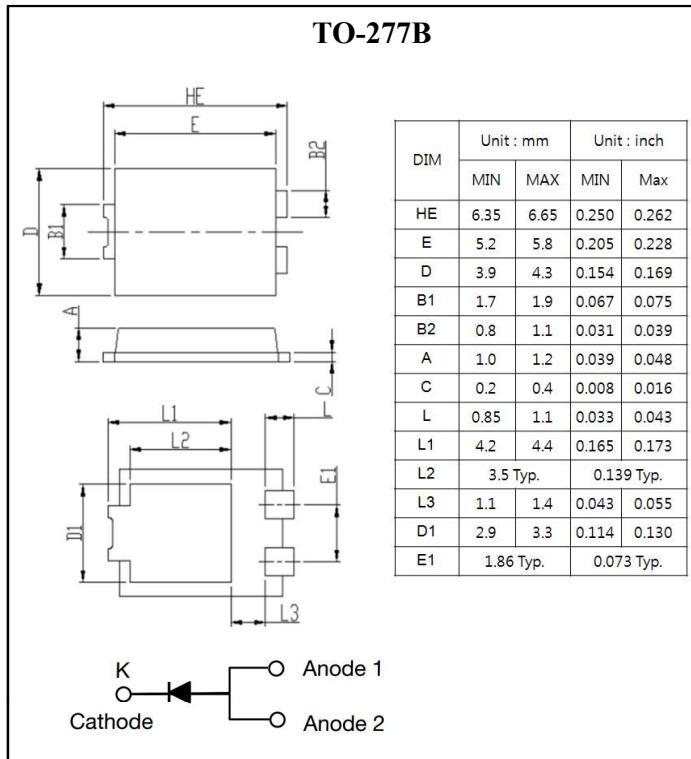
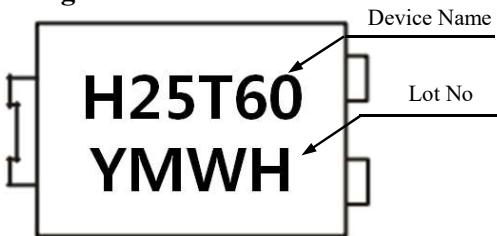
Features

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

Mechanical 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

Marking



Maximum Ratings

Ratings at 25°C ambient temperature unless otherwise specified

Single phase half wave 60 Hz, resistive or inductive load

For capacitive load, derate current by 20%

Parameter	Symbol	Rating		Unit
Maximum Repetitive Peak Reverse Voltage	V _{RRM}	60		V
Maximum Average Forward Rectified Current	I _{F(AV)}	25		A
Peak Forward Surge Current, 50Hz Half Sine-wave	I _{FSM}	320		A
Operating Junction and Storage Temperature Range	T _J & T _{STG}	-50 to +150		°C

Electrical Characteristics (Ta=25°C unless otherwise noted)

Characteristic	Symbol	Min.	Typ.	Max.	Unit	Test Condition
Forward Voltage Drop	V _F	-	0.32	0.34	V	I _F =3A , T _J =25 °C
		-	0.41	0.46	V	I _F =10A , T _J =25 °C
		-	0.56	0.60	V	I _F =25A, T _J =25 °C
		-	0.24	-	V	I _F =3A , T _J =125 °C
		-	0.38	-	V	I _F =10A , T _J =125 °C
		-	0.55	-	V	I _F =25A, T _J =125 °C
Leakage Current	I _R	-	-	0.5	mA	V _R =60V, T _J =25 °C
		-	-	60	mA	V _R =60V, T _J =125 °C
Junction Capacitance	C _J	-	850	-	pF	f=1MHZ, V _R =4V
Thermal Resistance (Note 1)	R _{th(j-a)}		94	-	°C/W	
	R _{th(j-l)}	-	10	-	°C/W	

Note 1 : Units mounted on recommended PCB. 1oz. pad layout



Ratings and Characteristics Curves (Ta=25°C unless otherwise noted)

Fig.1 Forward Current Derating Curve

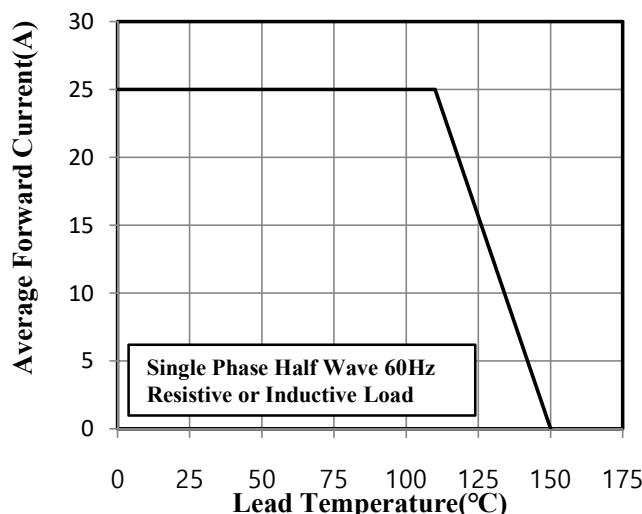


Fig.2 Maximum Non-Repetitive Peak Forward Surge Current

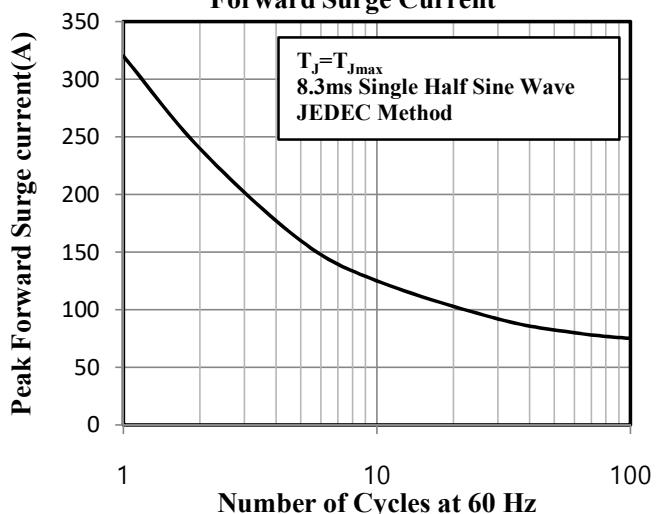


Fig.3 Typical Instantaneous Forward Characteristics

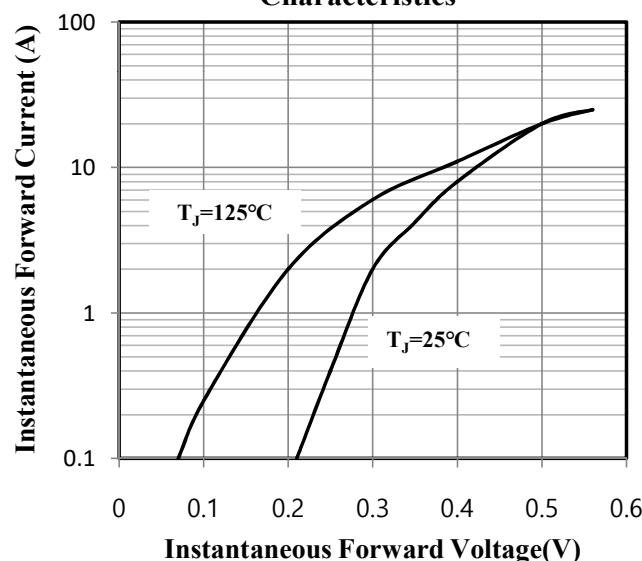


Fig.4 Typical Junction Capacitance

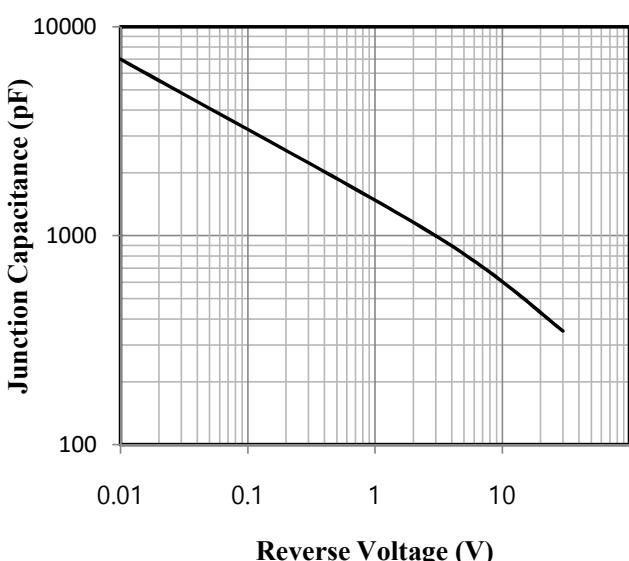


Fig.5 Typical Reverse Characteristics

