

Features

- Metal silicon junction, majority carrier conduction
- High forward surge current capability
- Low forward voltage drop
- High temperature soldering guaranteed: 260°C @ 10s
- Robust guarding for over voltage protection
- RoHS compliant with Halogen-free

Ordering Information

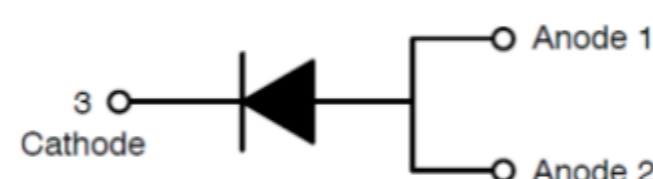
- Shipping Qty:5000/13inch Tape& Reel

Mechanical Data

- Case: TO-277B molded plastic
- Molding compound: UL flammability classification rating 94V-0
- Terminals: Solder plated, solderable per MIL- STD-202,Method 208



Circuit Diagram



Absolute Maximum Ratings ($T_A=25^\circ\text{C}$ unless otherwise noted)

Parameter	Symbol		Unit
Peak Repetitive Reverse Voltage	V_{RRM}	100	V
RMS Reverse Voltage	V_{RMS}	70	V
DC Blocking Voltage	V_{DC}	100	V
Average Forward Output Current	$I_{F(AV)}$	10	A
Peak Forward Surge Current, 8.3ms Single Half Sine wave	I_{FSM}	250	A

Thermal Characteristics

Parameter	Symbol		Unit
Typical Thermal Resistance *1	$R_{\theta JA}$	60	$^\circ\text{C/W}$
	$R_{\theta JC}$	20	
	$R_{\theta JL}$	15	
Operating Junction Temperature Range	T_J	-55 ~ +150	$^\circ\text{C}$
Storage Temperature Range	T_{STG}	-55 ~ +150	$^\circ\text{C}$

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

Parameter	Symbol	Test Conditions		Typ.	Max.	Unit
Instantaneous Forward Voltage* ¹	V _F	I _F = 10A	@ T _A = 25°C	-	0.7	V
Reverse Current* ²	I _R	Rated V _R	@ T _J = 25°C	-	150	μA
			@ T _J = 100°C	-	10	mA

Typical Electrical Characteristic Curves

Fig.1 Forward Current Derating Curve

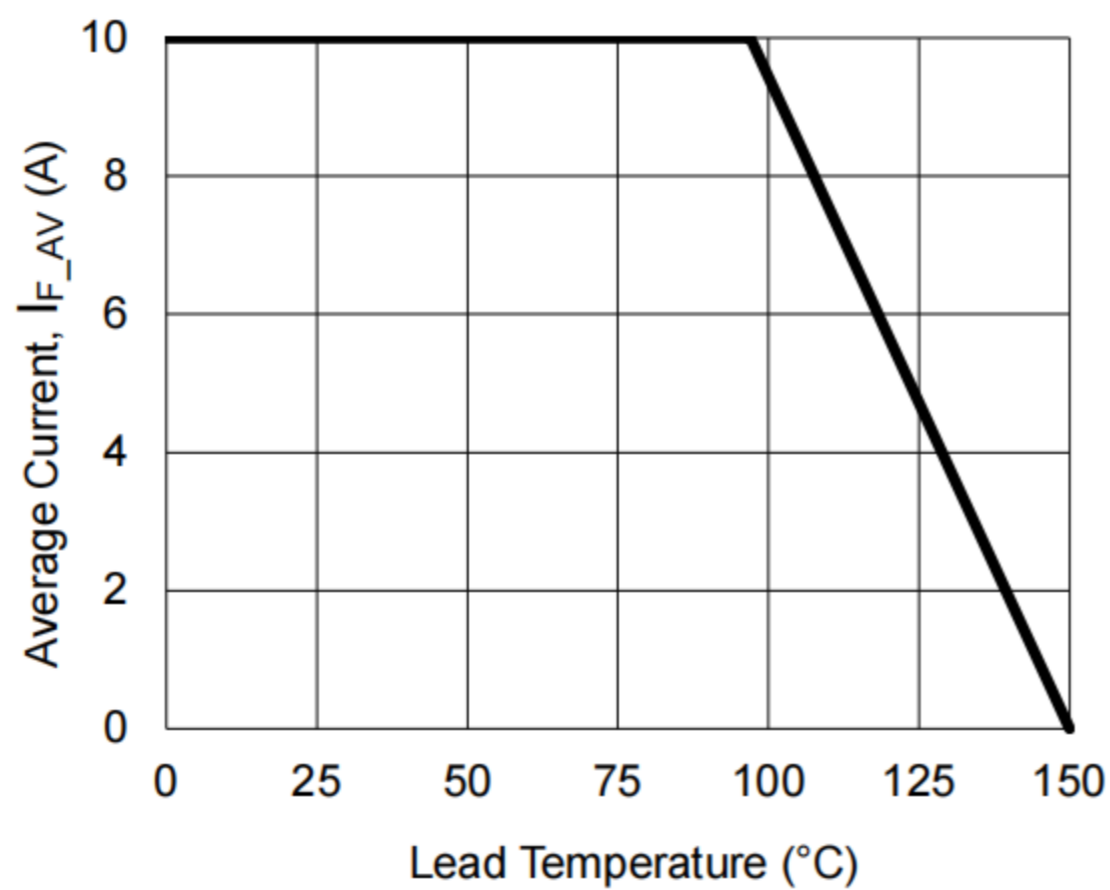


Fig.2 Surge Current Derating Curve

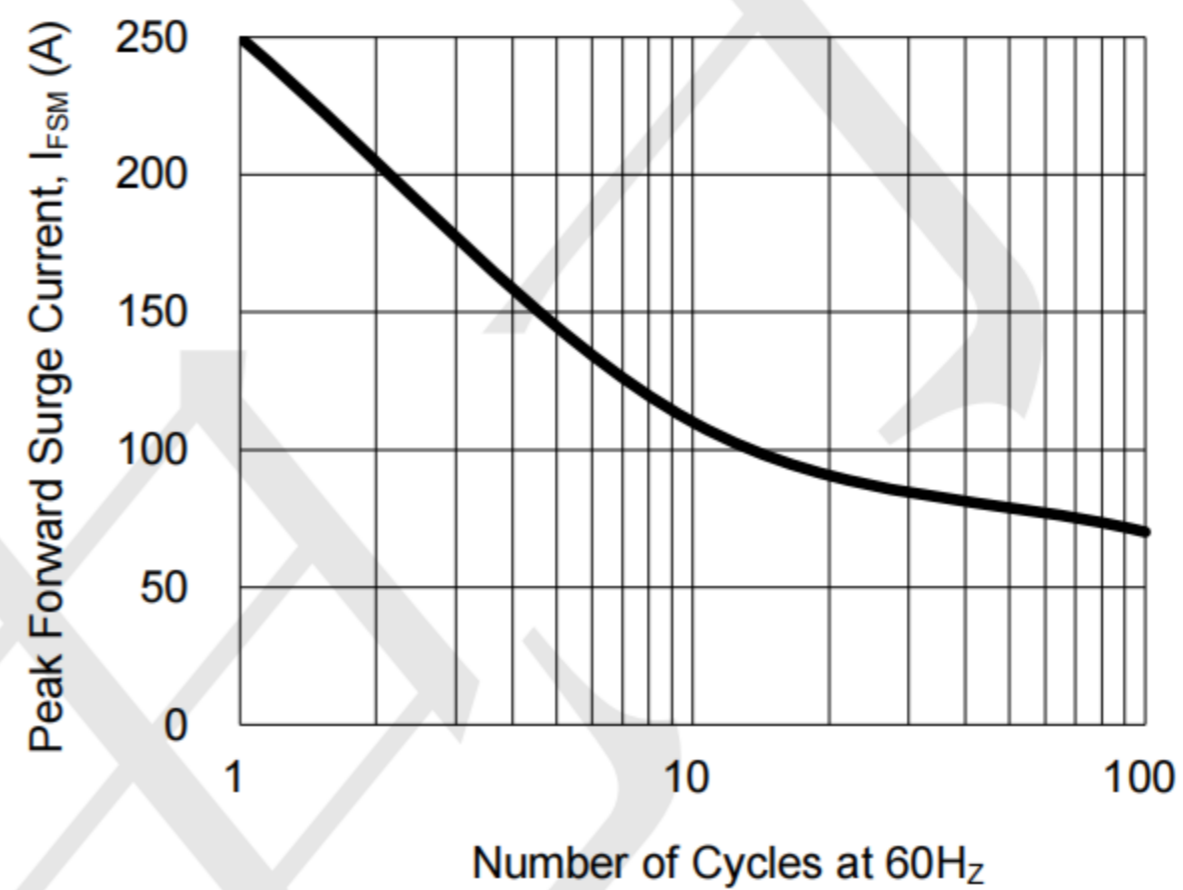


Fig.3 Typical Forward Voltage Characteristic

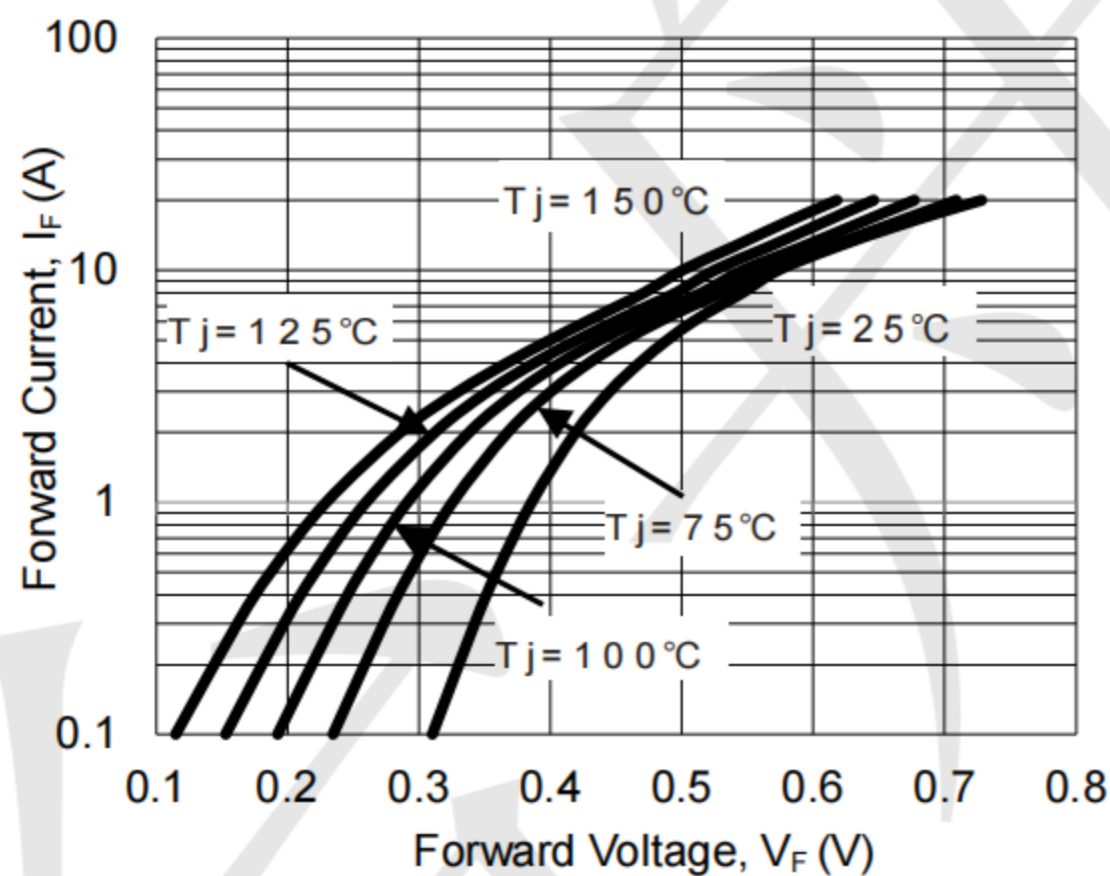
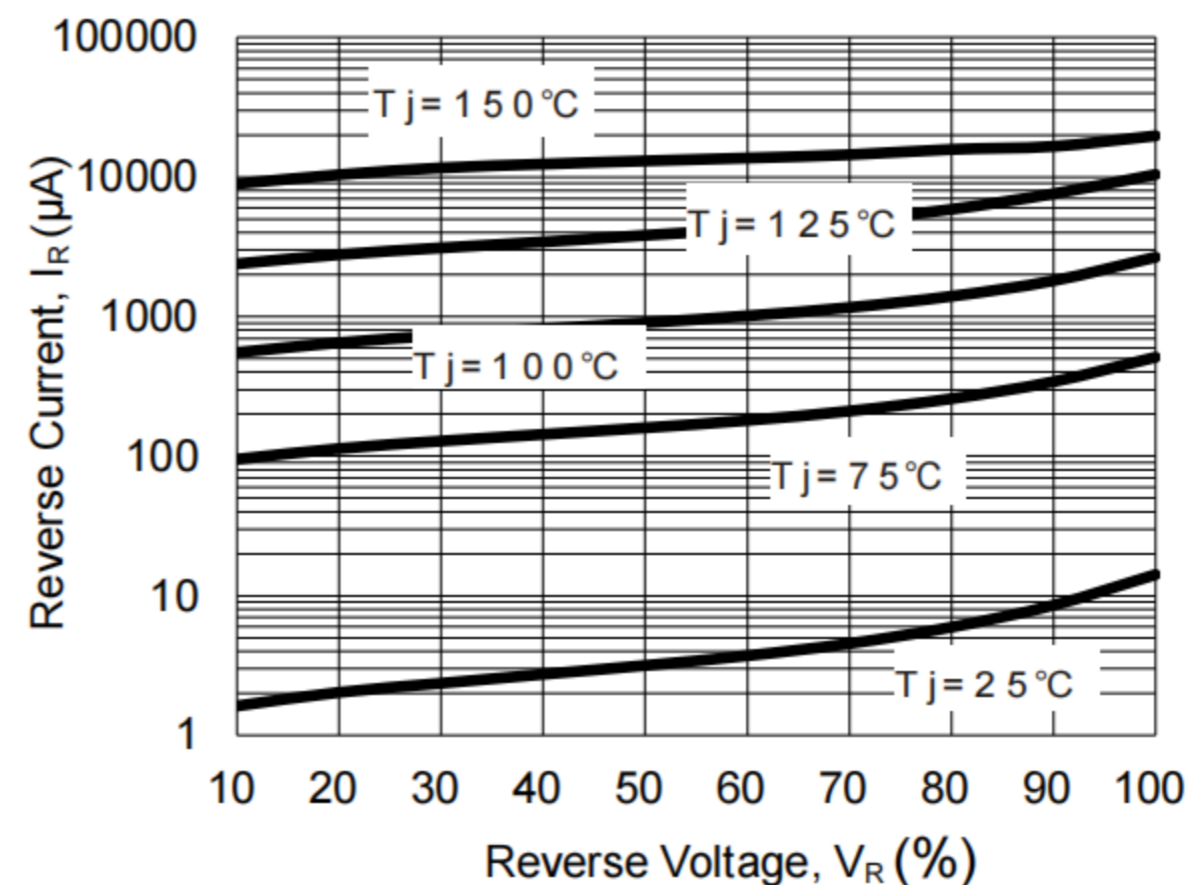
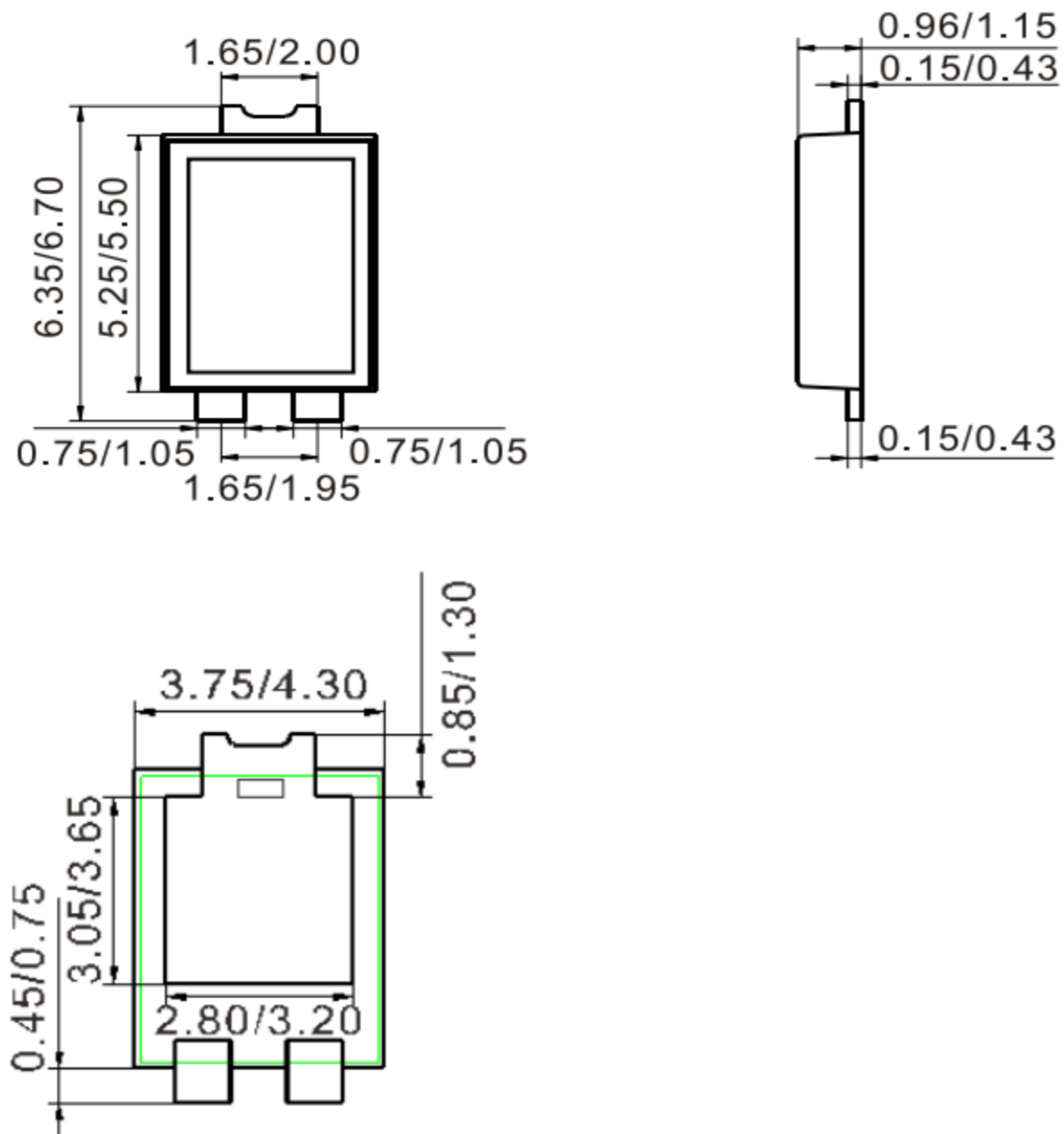


Fig.4 Typical Reverse Characteristic



Outline Drawing - TO-277B (unit: mm)



Mounting Pad Layout-TO-277B (unit: mm)

