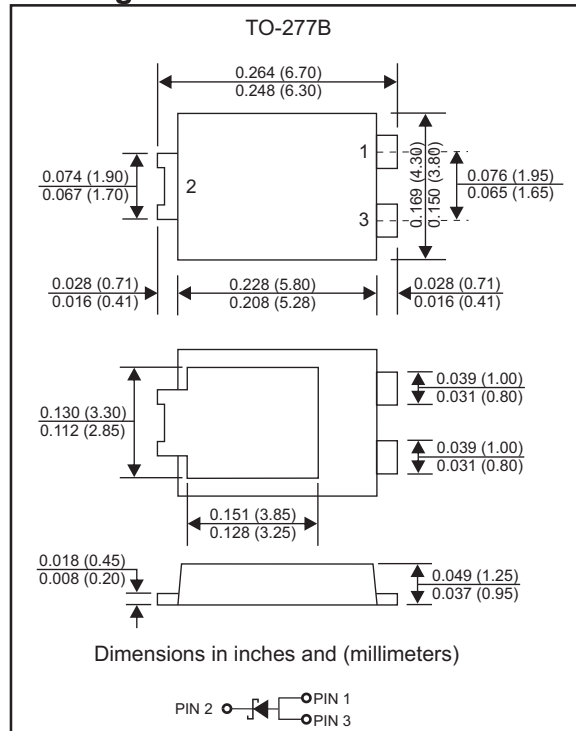


Package outline



Features

- Ultra Low Forward Voltage Drop .
- Very low profile-typical height of 1.10mm
- Low Power Losses,High Efficiency Operation
- Low Thermal Resistance Package.
- High Operating Junction Temperature.
- Compliant to Halogen-free
- Suffix "-Q1" for AEC-Q101

Mechanical data

- Epoxy:UL94-V0 rated flame retardant
- Case : TO-277B , molded Plastic
- Terminals:Solderable per MIL-STD-750,Method 2026

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

Parameter	Symbol	SU15200-T-Q1	Unit
DC Blocking Voltage	V_{DC}	200	V
Working Peak Reverse Voltage	V_{RWM}		
Repetitive Peak Reverse Voltage	V_{RRM}		
RMS Reverse Voltage	V_{RMS}	140	V
Average Forward Rectified Current	$I_{F(AV)}$	15.0	A
Peak Forward Surge Current,8.3ms Half Sine-wave($T_A=25^\circ\text{C}$)	I_{FSM}	200	A
Operating junction temperature range	T_J	-55 to +150	$^\circ\text{C}$
Storage temperature range	T_{STG}	-55 to +150	$^\circ\text{C}$

Electrical Characteristics (AT $T_A=25^\circ\text{C}$ unless otherwise noted)

Parameter	Test Conditions	Symbol	MIN.	TYP.	MAX.	Unit
Forward voltage	$I_F=15\text{A}, T_J=25^\circ\text{C}$	V_F	-	-	0.85	V
Reverse current	$V_R=200\text{V}, T_J=25^\circ\text{C}$	I_R	-		0.2	mA
	$V_R=200\text{V}, T_J=100^\circ\text{C}$		-		50	

Thermal Characteristics

Parameter	Symbol	SU15200-T-Q1	Unit
Typical thermal resistance junction to ambient (Note 1)	$R_{\theta JA}$	80	$^\circ\text{C}/\text{W}$
Typical thermal resistance junction to case (Note 1)	$R_{\theta JC}$	15	$^\circ\text{C}/\text{W}$

Note 1: Mounted on FR-4 PCB copper pad area. Cathode pad dimensions 4.95mm x 3.4mm.
Anode pad dimensions 1.55mm x 5.0mm.

Rating and characteristic curves

FIG. 1- DERATING CURVE OUTPUT RECTIFIED CURRENT

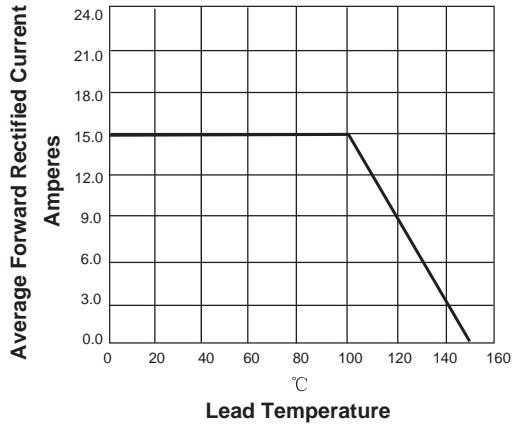


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PERLEG

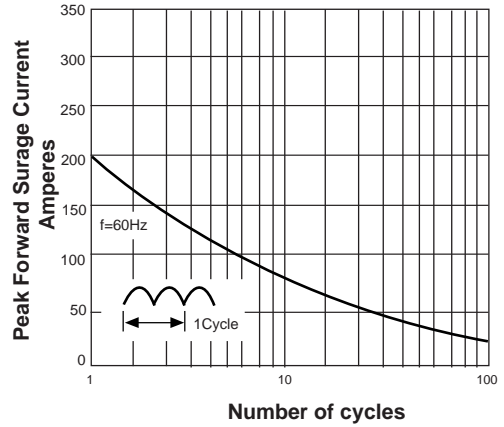


FIG. 1-TYPICAL FORWARD VOLTAGE CHARACTERISTICS

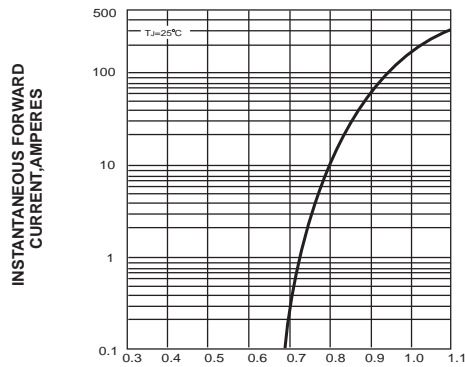


FIG. 2-TYPICAL REVERSE LEAKAGE CHARACTERISTICS

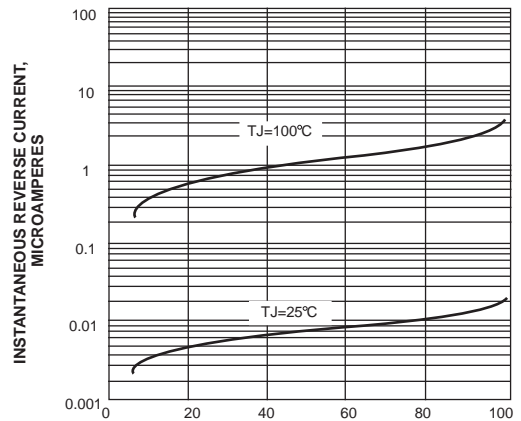

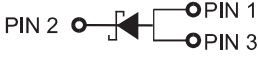


FIG. 3-INSTANTANEOUS FORWARD VOLTAGE, VOLTS

FIG. 4-PERCENT OF PEAK REVERSE VOLTAGE, %

Pinning information

Pin	Simplified outline	Symbol
Pin2 cathode Pin1 anode Pin3 anode		

Marking

Type number	Marking code
SU15200-T-Q1	SU15200

Suggested solder pad layout

