

SCHOTTKY BARRIER RECTIFIER

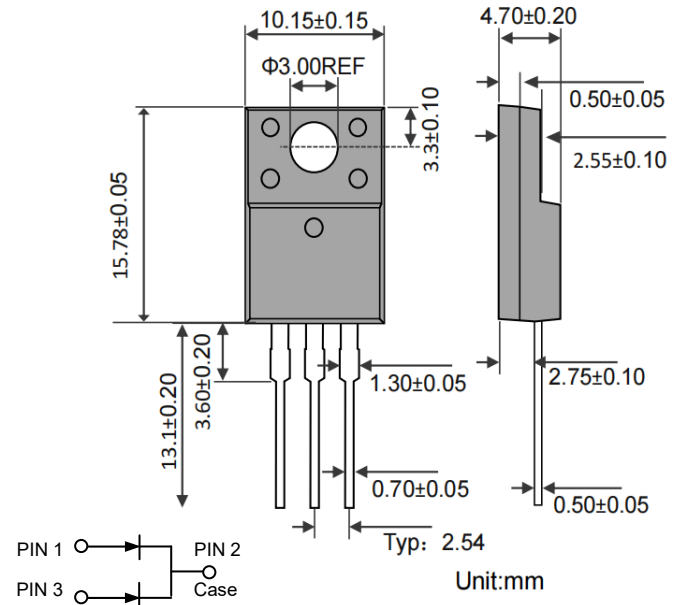
ITO-220AB

Features

- Power Schottky Barrier Chip
- Guard Ring for Transient Protection
- Low Forward Voltage Drop
- Low Power Loss, High Efficiency
- High Surge Current Capability
- Epoxy Meets UL 94V-0 Classification
- Ideally Suited for Use in High Frequency SMPS, Inverters and As Free Wheeling Diode

Primary Use

- Case: ITO-220, Full Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: See Diagram
- Weight: 1.9 grams (approx.)
- Mounting Position: Any
- Mounting Torque: 0.6 N.m Max.
- Lead Free: For RoHS / Lead Free Version,

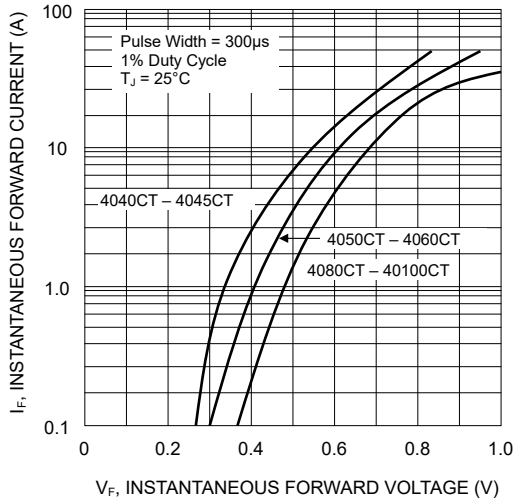
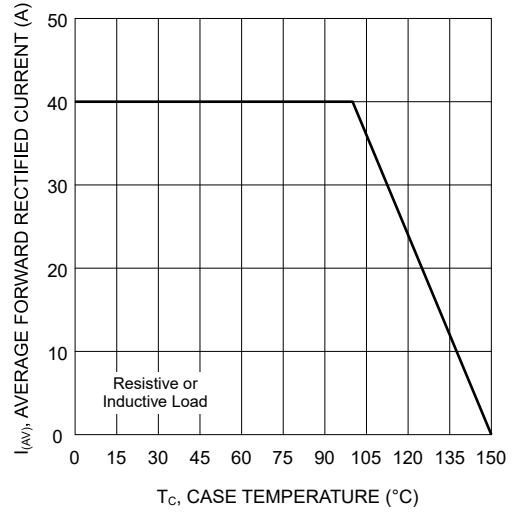
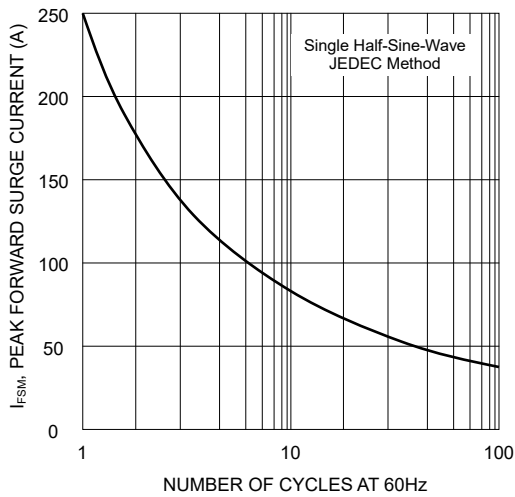
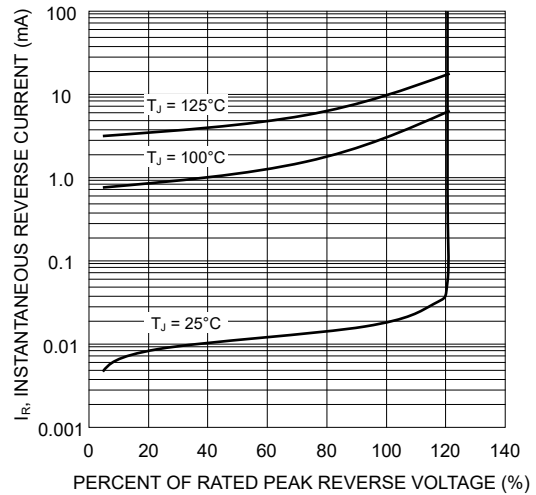
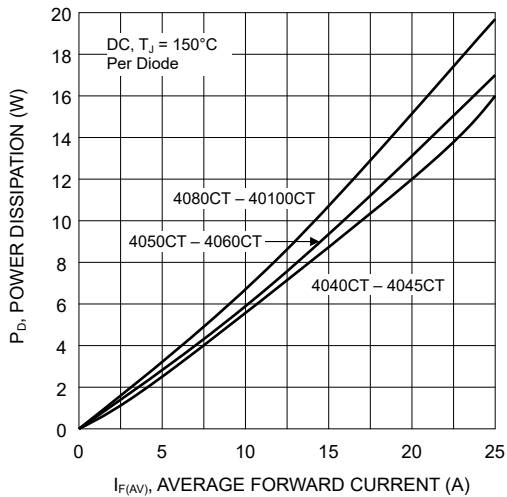
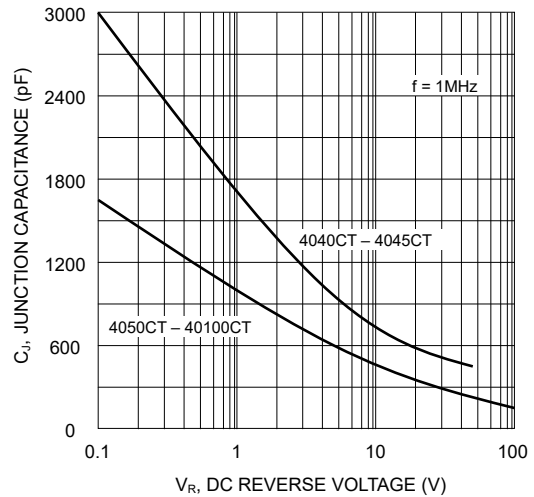


Maximum Ratings and Electrical Characteristics @ $T_A=25^\circ\text{C}$ unless otherwise specified

Single Phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Characteristic	Symbol	SRF 4040CT	SRF 4045CT	SRF 4050CT	SRF 4060CT	SRF 4080CT	SRF 40100CT	Unit
Peak Repetitive Reverse Voltage	V_{RRM}							
Working Peak Reverse Voltage	V_{RWM}	40	45	50	60	80	100	V
DC Blocking Voltage	V_R							
RMS Reverse Voltage	$V_{R(RMS)}$	28	32	35	42	56	70	V
Average Rectified Output Current @ $T_C = 100^\circ\text{C}$	I_O	40 20						A
Non-Repetitive Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC Method)	I_{FSM}	250						A
Forward Voltage per diode @ $I_F = 20\text{A}$, $T_J = 25^\circ\text{C}$ @ $I_F = 20\text{A}$, $T_J = 125^\circ\text{C}$	V_{FM}	0.70 0.60		0.75 0.65		0.85 0.75		V
Peak Reverse Current At Rated DC Blocking Voltage @ $T_J = 25^\circ\text{C}$ @ $T_J = 100^\circ\text{C}$	I_{RM}	1.0 20						mA
Typical Junction Capacitance (Note 1)	C_J	1100		650				pF
Thermal Resistance Junction to Ambient per diode Thermal Resistance Junction to Case per diode	$R_{\theta JA}$ $R_{\theta JC}$	52 4.0						$^\circ\text{C/W}$
RMS Isolation Voltage, $t = 1\text{ min}$	V_{ISO}	1500						V
Operating and Storage Temperature Range	T_J, T_{STG}	-55 to +150						$^\circ\text{C}$

Note: 1. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.

Fig.1 - Typical Forward Characteristics

Fig.2 - Forward Current Derating Curve

Fig. 3 - Forward Surge Current Derating Curve

Fig. 4 - Typical Reverse Characteristics

Fig. 5 Forward Power Dissipation

Fig. 6 Typical Junction Capacitance


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