



SCHOTTKY BARRIER RECTIFIERS	REVERSE VOLTAGE 100 Volts FORWARD CURRENT 3 Amperes
FEATURES <ul style="list-style-type: none"> ●Metal of silicon rectifier , majority carrier conduction ●Trench Schottky Technology ●Low forward voltage drop, high efficiency ●High current capability ●High surge capacity ●Plastic package has UL flammability classification 94V-0 ●For use in low voltage,high frequency inverters,free wheeling,switching power supplies, DC-DC converter,and polarity protection applications 	<p>Dimensions in inches and (millimeters)</p>
MECHANICAL DATA <ul style="list-style-type: none"> ●Case: JEDEC DO-15 molded plastic ●Polarity: Color band denotes cathode ●Weight: 0.0125ounces,0.4 grams ●Mounting position :Any 	

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25°C ambient temperature unless otherwise specified.
 Single phase, half wave ,60Hz, resistive or inductive load.
 For capacitive load, derate current by 20%

MAXIMUM RATINGS (T_A = 25 °C unless otherwise noted)

CHARACTERISTICS	SYMBOL	HTE3U100	UNIT
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	100	V
Maximum RMS Voltage	V _{RMS}	70	V
Maximum DC Blocking Voltage	V _{DC}	100	V
Maximum Average Forward Rectified Current (See Fig.1)	I _(AV)	3	A
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Super Imposed on Rated Load	I _{FSM}	30	A
Peak repetitive reverse current at tp = 2 μs, 1 kHz	I _{RRM}	2	A
Operating Temperature Range	T _J	-55 to +150	°C
Storage Temperature Range	T _{STG}	-55 to +175	°C

ELECTRICAL CHARACTERISTICS (T_A = 25 °C unless otherwise noted)

PARAMETER / CONDITIONS	SYMBOL	Typ	Max	UNIT
Breakdown voltage per diode	V _{BR}	105 (minimun)	-	V
Forward Voltage (Note1)	V _F	IF=1.5A @TJ=25°C	0.50	0.54
		IF=1.5A @TJ=125°C	0.43	0.46
		IF=3A @TJ=25°C	0.59	0.65
		IF=3A @TJ=125°C	0.55	0.59
Maximum DC Reverse Current @TJ=25°C	I _R	75		uA
at Rated DC Bolcking Voltage @TJ=125°C		30		mA
Typical Junction Capacitance (Note2)	C _J	217		pF

THERMAL CHARACTERISTICS (T_A = 25 °C unless otherwise noted)

PARAMETER	SYMBOL	Typ	UNIT
		HTE3U100	
Thermal Resistance Per Diode (Note3)	RθJL	15	°C/W

NOTES:1.300us pulse width,2% duty cycle.
 2.Measured at 1.0 MHz and applied reverse voltage of 4.0V DC.
 3.Thermal resistance junction to lead.

RATING AND CHARACTERISTIC CURVES

HTE3U100

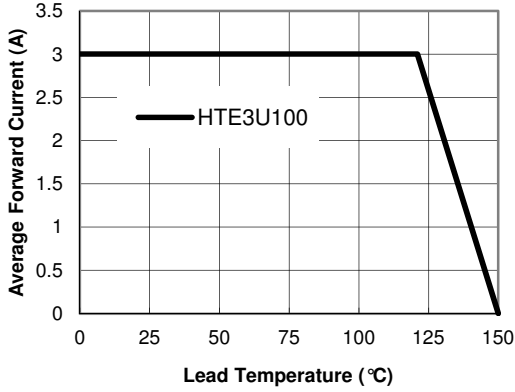


Figure 1. Forward Current Derating Curve

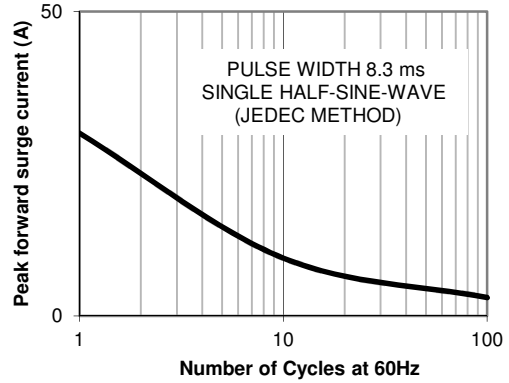


Figure 2. Maximum NON-Repetitive

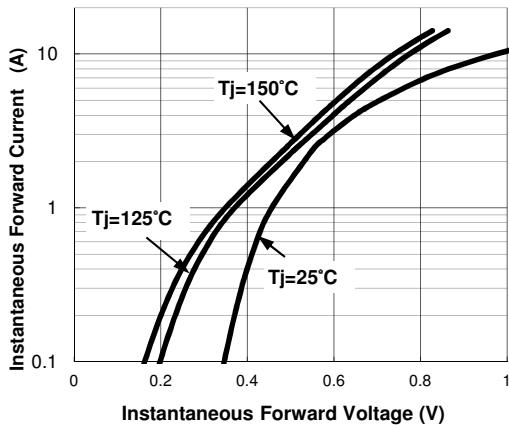


Figure 3. Typical Instantaneous Forward Characteristics Per Leg

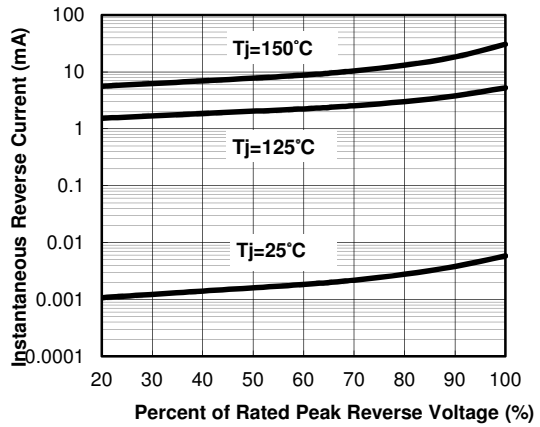


Figure 4. Typical Reverse Characteristics

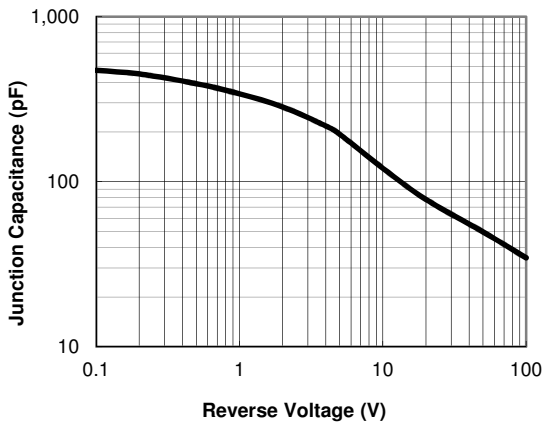


Figure 5. Typical Junction Capacitance

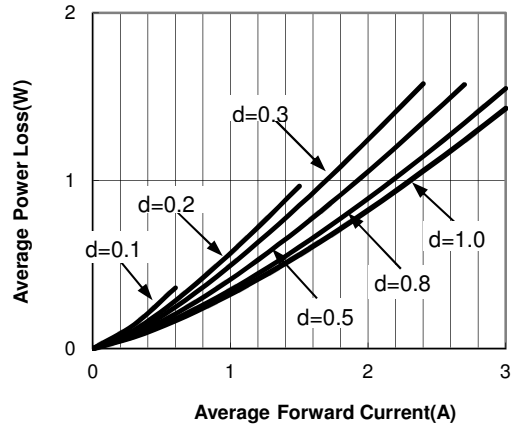


Figure 6. Forward Power Loss Characteristics

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