



## SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

1N5711

VOLTAGE RANGE  
CURRENT

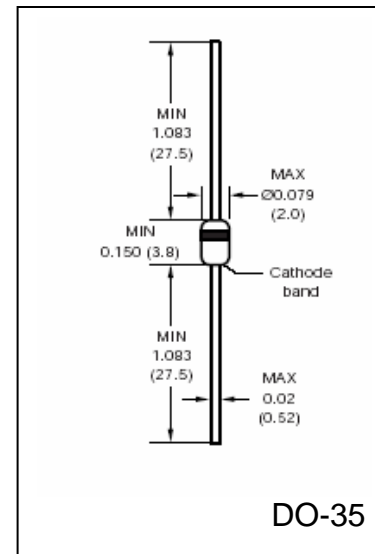
70 Volts  
15 mAmps

### FEATURES

- Low forward voltage drop
- High speed switching
- Guard ring construction for transient protection
- Low reverse leakage
- High Temperature soldering guaranteed:  
260°C / 10 second, 0.375" (9.5mm) lead length

### MECHANICAL DATA

- Case: DO-35 glass package
- Lead: Plated axial lead, solderable per MIL-STD-202E method 208C
- Polarity: Color band denoted cathode end
- Mounting Position: any
- Weight: 0.0045 ounce, 0.13gram



### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

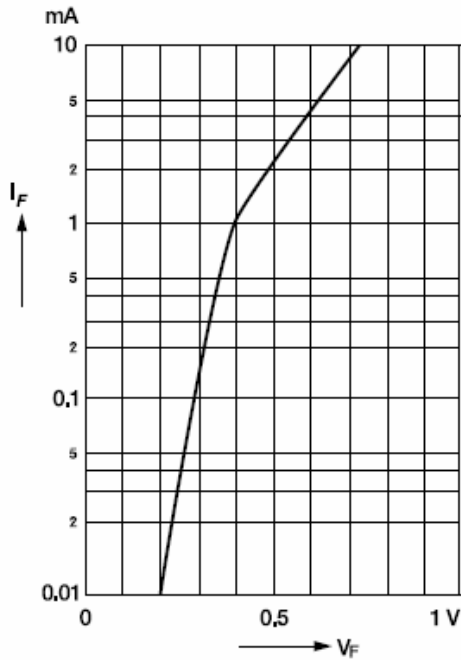
	SYMBOLS	1N5711	UNIT
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	70	Volts
Maximum RMS Voltage	$V_{RMS}$	49	Volts
Maximum DC Blocking Voltage	$V_{DC}$	70	Volts
Maximum Average Forward Rectified Current,	$I_{(AV)}$	15	mA
Peak Forward Surge Current 10μS square wave superimposed on rated load	$I_{FSM}$	2.0	Amps
Power Dissipation (Note 1)	$P_D$		
Maximum Instantaneous Forward Voltage $I_F = 1.0mA$ $I_F = 15mA$	$V_F$	0.41 1.0	Volts
Maximum DC Reverse Current @ $V_R = 50V$	$I_R$	200	nA
Maximum Reverse Recovery Time , $I_F = 5mA, I_R = 5mA, recover to 0.1I_R$	$t_{rr}$	1.0	nS
Typical Junction Capacitance	$C_J$	2.0	pF
Typical Thermal Resistance (Note 1)	$R_{\theta JA}$	300	°C/W
Operating Junction Temperature Range (Note 1)	$T_J$	(-55 to +125)	°C
Storage Temperature Range (Note 1)	$T_{STG}$	(-55 to +150)	°C

### Notes:

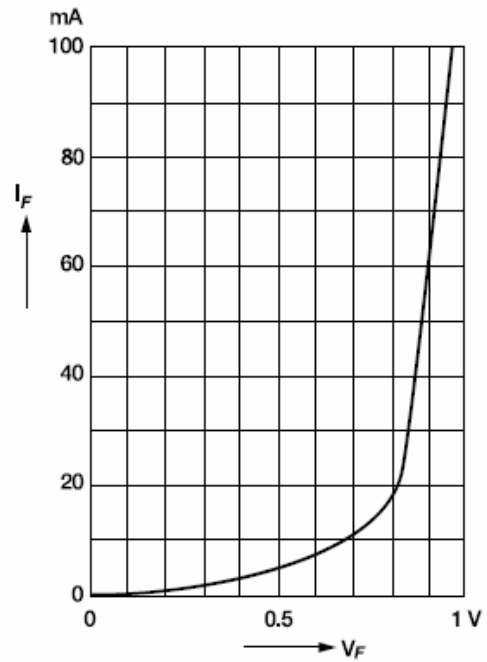
1. Valid provided leads at a distance of 4mm from case and kept at ambient temperature

## RATINGS AND CHARACTERISTIC CURVES 1N5711

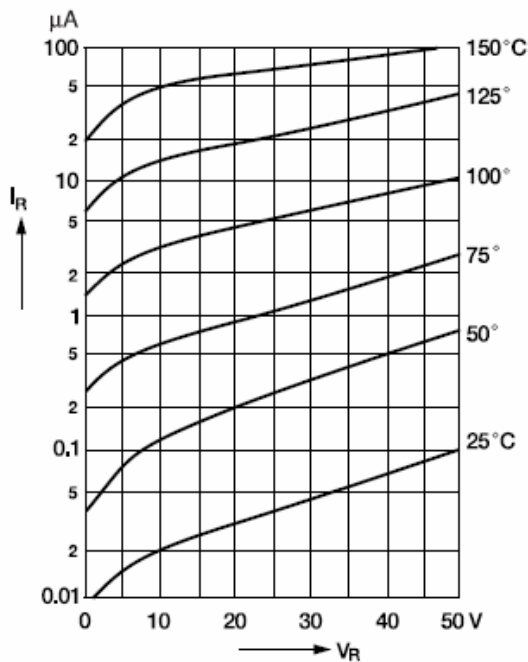
Typical variation of fwd. current vs. fwd. voltage for primary conduction through the Schottky barrier



Typical forward conduction curve of combination Schottky barrier and PN junction guard ring



Typical variation of reverse current at various temperatures



Typical capacitance curve as a function of reverse voltage

