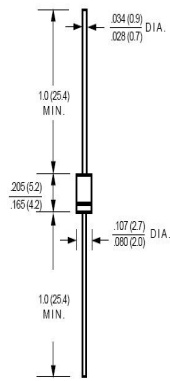


Schottky Barrier Rectifiers



DO-41

Dimensions in inches and (millimeters)



Features

- Guardring for overvoltage protection
- Very small conduction losses
- Low forward voltage drop
- Component in accordance to RoHS 2002/95/EC

Mechanical Data

- Cases: DO-41
- Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0
- Terminals: Lead free Plating (Tin Finish)
Solderable per MIL-STD-202, Method 208
- Polarity: Cathode Band
- Weight: 0.318 grams (approximate)

PRIMARY CHARACTERISTICS	
I_F	1 A
V_{RRM}	40V
I_{FSM}	30 A
V_F	0.50V
$T_J \text{ max}$	125°C

❖ ORDER/MARKING INFORMATION

Order Information	Top Marking
<p>Ordering code: B X X X X X</p> <p>Peak Current: 1: 1A</p> <p>Voltage: 40: 40V</p> <p>Type: S: DO-41</p> <p>Assembly Material Blank: G: Halogen and Lead Free Device</p>	<p>AXE YW</p> <p>B 140 S X X</p> <p>W: 01-26(A-Z) 27-52(a-z) Year: A = 2010</p> <p>Assembly Material Blank: G: Halogen and Lead Free Device</p> <p>ID code: Internal</p> <p>S: B140S</p>

MAXIMUM RATINGS (TA=25°C unless otherwise noted)			
PARAMETER	SYMBOL	B140S	UNIT
Maximum repetitive peak reverse voltage	V_{RRM}	40	V
Maximum RMS voltage	V_{RMS}	28	V
Maximum DC blocking voltage	V_{DC}	40	V
Maximum average forward rectified current	I_F	1.0	A
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	30.0	A
Maximum Instantaneous Forward Voltage @ 1.0A	V_F	0.50	V
Maximum DC Reverse Current @ TA=25°C at Rated DC Blocking Voltage @ TA=100°C	I_R	0.5 10	mA
Typical Junction Capacitance(NOTE1)	C_J	70	pF
Typical Thermal Resistance	$R_{\theta JA}$	70	°C/W
Operating Temperature Range	T_J	-55 to +125	°C
Storage Temperature Range	T_{STG}	-55 to +150	°C

NOTES:1.Measured at 1.0MHZ and applied reverse voltage of 4.0V DC

FIG. 1-TYPICAL FORWARD CURRENT DERATING CURVE

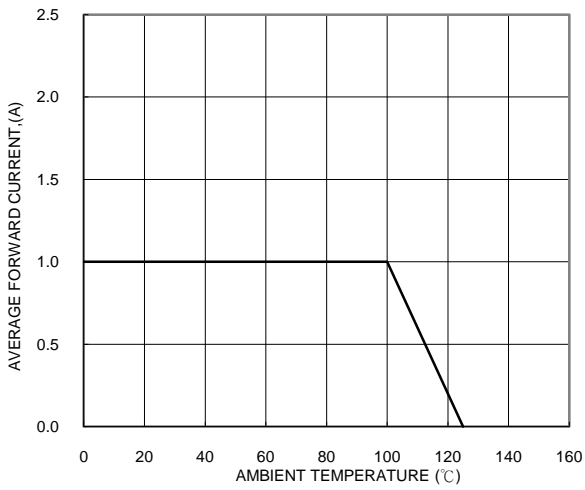


FIG. 2-TYPICAL FORWARD CHARACTERISTICS

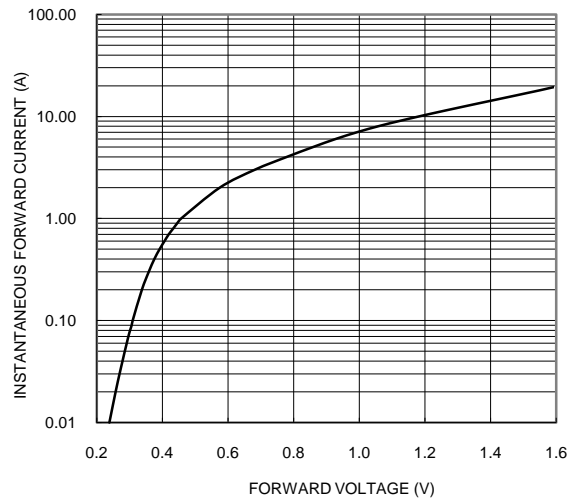


FIG. 3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

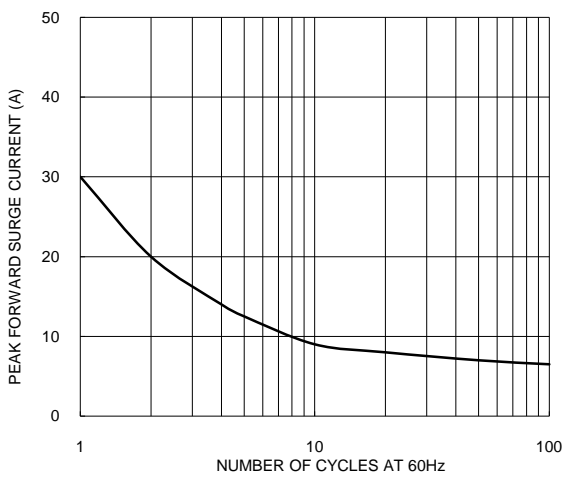


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

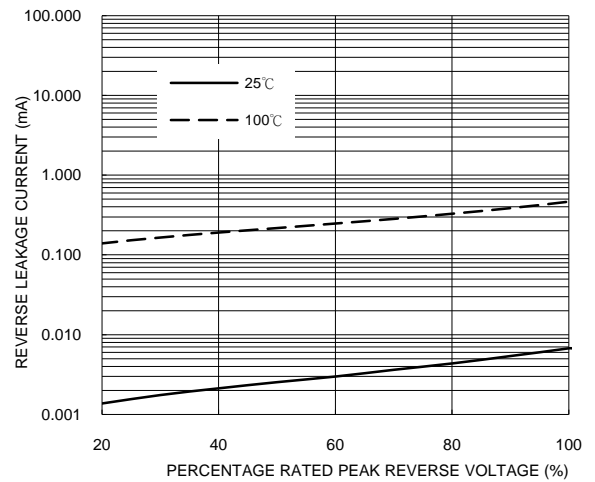


FIG. 5-TYPICAL JUNCTION CAPACITANCE

