

Pb Free Plating Product

BY127 thru BY133



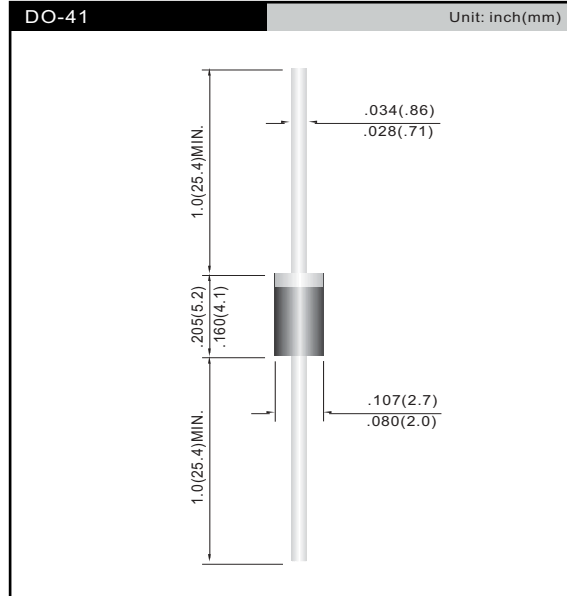
1.0 Ampere DO-41 Package High Voltage Silicon Diode

Features

- Low forward voltage drop
- High current capability
- High surge current capability

Mechanical Data

- Case: Molded plastic, DO-41
- Epoxy: UL 94V-0 rate flame retardant
- Lead: Axial leads, solderable per MIL-STD-202 method 208 guaranteed
- Polarity: Color band denotes cathode end
- Mounting position: Any



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 by 20%)

	Symbols	BY127	BY133	EM513	EM516	Units
Maximum repetitive peak reverse voltage	V _{RRM}	1250	1300	1600	1800	Volts
Maximum RMS voltage	V _{RMS}	875	930	1120	1270	Volts
Maximum DC blocking voltage	V _{DC}	1250	1300	1600	1800	Volts
Maximum average forward rectified current 0.375"(9.5mm)lead length at T _A =75°C	I _(AV)	1.0				Amp
Peak forward surge current 8.3ms sing-wave superimposed on rated load (JEDEC method) T _A =75°C	I _{FSM}	30.0				Amps
Maximum instantaneous forward voltage at 1.0 A	V _F	1.1				Volts
Maximum reverse current at rated DC blocking voltage	T _A =25°C	5.0				μ A
	T _A =100°C	200.0				
Typical thermal resistance(Note 2)	R _θ JA	50.0				°C/W
	R _θ JL	25.0				
Typical junction Capacitance(Note 1)	C _J	15.0				pF
Operating and storage temperature range	T _J	-50 to +150				°C
	T _{STG}					

Notes: 1. Measured at 1MHz and applied reverse voltage of 4.0V DC
 2. Thermal resistance from junction to ambient and from junction lead at 0.375"(9.5mm)lead length, P.C.B. Mounted

RATINGS AND CHARACTERISTIC CURVES BY127 thru BY133

FIG.1-FORWARD CURRENT DERATING CURVE

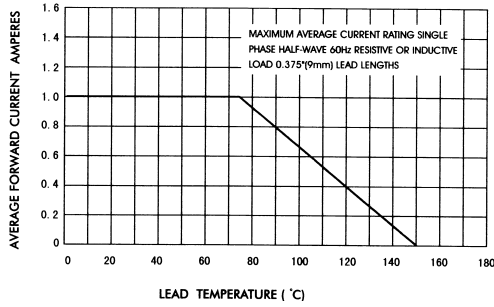


FIG.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

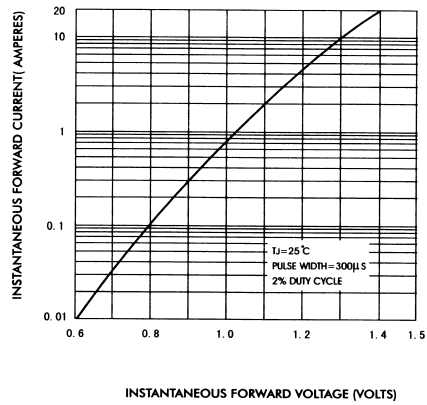


FIG.3-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

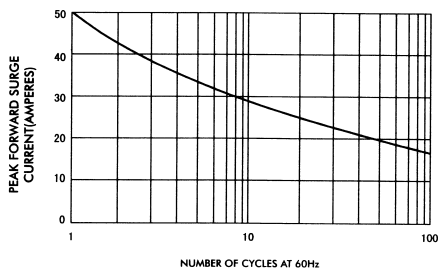


FIG.4-TYPICAL REVERSE CHARACTERISTICS

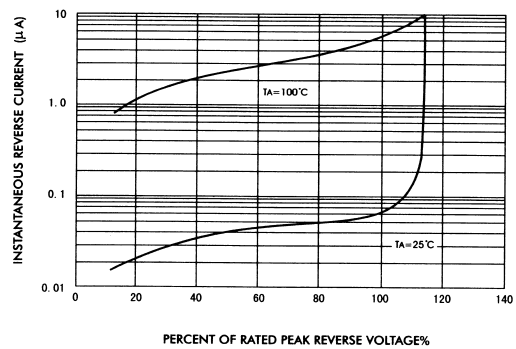


FIG.5-TYPICAL JUNCTION CAPACITANCE

