



PLASTIC SILICON RECTIFIERS

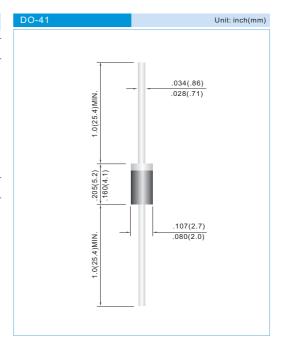
VOLTAGE 1250 to 1600 Volts CURRENT 1.0 Ampere

FEATURES

- · Low forward voltage drop
- · High current capability
- · High reliability
- · High surge current capability
- Exceeds environmental standards of MIL-S-19500/228
- Lead free in compliance with EU RoHS 2011/65/EU directive

MECHANICAL DATA

- · Case: DO-41 Molded plastic
- Epoxy: UL 94V-O rate flame retardant.
- Lead: Axial leads, solderable per MIL-STD-750, Method 2026
- · Polarity: Color band denotes cathode end
- · Mounting Position: Any
- · Weight: 0.012 ounces, 0.30 gram



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

PARAMETER	SYMBOL	BY127M	BY133	EM513	UNITS
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	1250	1300	1600	V
Maximum RMS Voltage	V _{RMS}	875	910	1120	V
Maximum DC Blocking Voltage	V _{DC}	1250	1300	1600	V
Maximum Average Forward Current .375"(9.5mm) lead length at T _A =75°C	I _{F(AV)}		А		
Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load(JEDEC method)	I _{FSM}	30			А
Maximum Forward Voltage at 1.0A	V _F		V		
Maximum DC Reverse Current at T _J =25°C Rated DC Blocking Voltage T _J =100°C	I _R	5.0 500			μА
Typical Junction capacitance (Note 1)	CJ	15			pF
Typical Thermal Resistance(Note 2)	R _{eJA} R _{eJL}	50 25			°C / W
Operating and Storage Temperature Range	T _J ,T _{STG}	-55 to +150			°C

NOTES:

- 1. Measured at 1 MHz and applied reverse voltage of 4.0 VDC.
- 2. Thermal Resistance from Junction to Ambient and from junction to lead at 0.375"(9.5mm)lead length P.C.B.mounted.





RATING AND CHARACTERISTIC CURVES

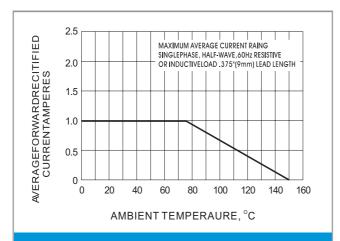


Fig.1-FORWARD CURRENT DERATING CURVE

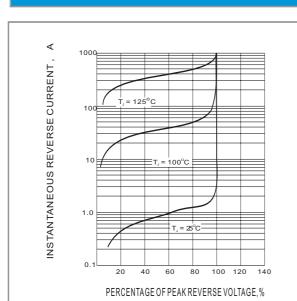


Fig.3-TYPICAL REVERSE CHARACTERISTIC

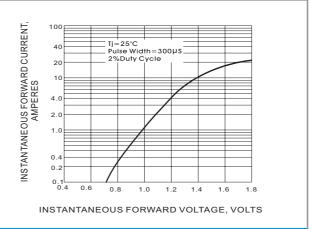


Fig.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

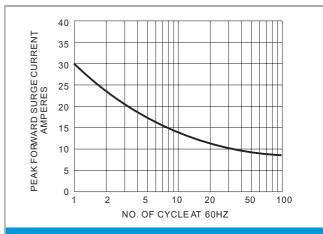


Fig.4-MAXIMUMNON-REPETITIVE SURGE CURRENT

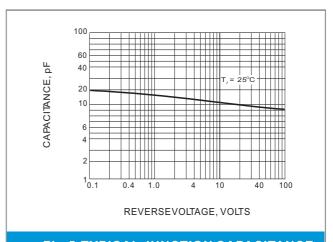


Fig.5-TYPICAL JUNCTION CAPACITANCE





Part No_packing code_Version

EM513_AY_00001

EM513_AY_10001

EM513_B0_00001

EM513_B0_10001

EM513_R2_00001

EM513_R2_10001

For example:



Packing Code XX				Version Code XXXXX			
Packing type	1 st Code	Packing size code	2 nd Code	HF or RoHS	1 st Code	2 nd ~5 th Code	
Tape and Ammunition Box (T/B)	A	N/A	0	HF	0	serial number	
Tape and Reel (T/R)	R	7"	1	RoHS	1	serial number	
Bulk Packing (B/P)	В	13"	2				
Tube Packing (T/P)	Т	26mm	Х				
Tape and Reel (Right Oriented) (TRR)	S	52mm	Y				
Tape and Reel (Left Oriented) (TRL)	L	PANASERT T/B CATHODE UP (PBCU)	U				
FORMING	F	PANASERT T/B CATHODE DOWN (PBCD)	D				





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